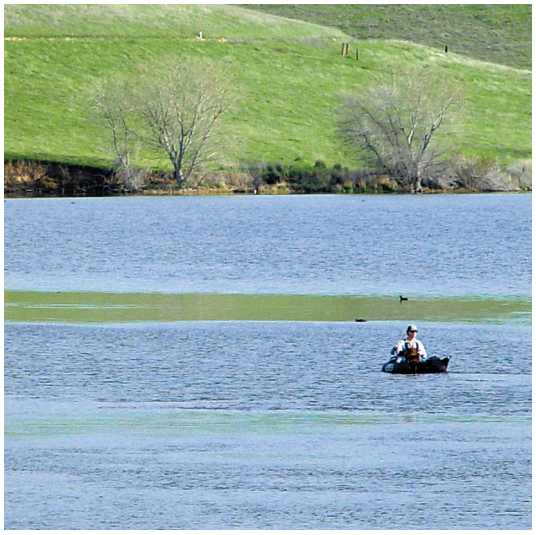


SAN LUIS RESERVOIR SRA

3. Park Plan

3. *Project Plan Overview*

This chapter is the core of the Plan, setting forth the policies needed to manage all aspects of the project area. It describes the comprehensive long-range purpose and vision for the future of the project area. It provides policies in the form of goals and guidelines to guide future management. This chapter also sets forth management zones for different geographic areas of the project area, each with their own resource goals and land uses. It then presents a description of the alternatives that were developed to implement the Plan. The Plan is a guiding document that will give project area staff a blueprint for managing visitor uses and facilities while also protecting natural, cultural, and scenic resources for the next 25 years. The Plan is designed to be in compliance with applicable state and federal planning initiatives and policies as presented in report summaries outlined in Chapter 2. This chapter also serves as the project description for the program-level Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The Plan is a program-level policy document and is analyzed accordingly under NEPA/CEQA requirements in Chapter 4. Future, project-level analysis will occur as specific components of the preferred alternative are developed, subsequent to the approval of this Plan.

3.1 PURPOSE AND VISION

This section summarizes the Declaration of Purpose that currently exists for the project area, and provides updated factors from the California Department of Parks and Recreation (Department) and U.S. Bureau of Reclamation (Reclamation) that need to be considered for the future management of the project area. A new, revised Declaration of Purpose is included here to reflect the past, present and future purpose and vision. The Declaration of Purpose, as previously adopted by the Department, describes the project area's purpose and is the broadest statement of management goals designed to fulfill the vision for the project area. A Declaration of Purpose is consistent with Public Resources Code (PRC) §5002.2(b), which requires "setting forth specific long-range management objectives for the unit consistent with the unit's classification…."

Declaration of Purpose

The Declaration of Purpose is the "mission statement" for the project area. It guides the contents of the Plan and therefore the future management of the unit. The Department set forth a purpose statement when the facilities were first developed in 1966 as follows::

> *To make possible the full utilization of the aquatic and other recreational opportunities in and about San Luis Reservoir and its forebay, located in western Merced County; together with consideration for all scientific, scenic and historical resources of the area.*
>
> *The function of the division of Beaches and Parks at San Luis Reservoir State Recreation Area is to design, construct, operate and maintain public recreational facilities of such scope and in such manner as to realize the maximum recreational potential of the area, consistent with the orderly operation of the Water Project facility for its other authorized purposes; and to protect and enhance the resources of the area in accordance with its declared purpose.*

Additionally, during the planning process the Department conducted in-house workshops to determine the key issues that needed to be covered in a new Plan. A summary of key values for the project area as noted in the Department purpose statement of November 2001 includes:

- Water storage, supply, and distribution facilities and infrastructure;
- Water and land-based recreation including hiking, camping, windsurfing, boating, and fishing;
- Plant communities including grassland, and riparian;
- Special-status and other wildlife species (e.g., See Table 2-10);
- Culturally and historically significant areas;
- Open space/scenic vistas; and
- Interpretive and concession opportunities.

The following management objectives developed by Reclamation further define management objectives for the project area that should be embraced in a revised Declaration of Purpose:

- Identify the current and most appropriate future uses of land and water resources within the project area.
- Identify long-term resource management and implementation policies to manage, protect, and preserve recreation, natural, and cultural resources while providing visitor interpretation and education to enhance stewardship.
- Determine the opportunities for new or enhanced recreation facilities to meet the demands of a growing, diverse population, based on demand and carrying capacity limits.
- Identify opportunities and develop partnerships for managing recreational and natural resources.
- Provide adequate public safety and security measures for protection of visitors and resources.
- Ensure timely delivery of quality water to the public while enhancing natural resources and recreational opportunities.
- Provide framework for establishing a new management agreement with the Department.

Based on key values and management objectives, the comprehensive purpose statement for the project area encompasses the past, present and future purpose and vision is proposed as the new purpose statement and is defined by the Department and Reclamation as:

> *To preserve, expand, and improve the current and future regional land and water-based recreation in the State through the long-term continuation of interagency agreements that promote resource management at the project area and in connection with regional parks and open space and will provide for the protection, maintenance, restoration, and interpretation of natural and cultural resources, while continuing to store and distribute water for the region.*

Vision

The project area vision describes the future essential character and overall appearance of the project area during various phases of Plan implementation and, ultimately, upon completion of Plan development. The project area will continue to serve a broad spectrum of visitors from many locations throughout the state

to enjoy and participate in a variety of water- and land-based recreation while protecting the natural and cultural resources. The three reservoirs will be managed to provide recreational activities differing in intensity to allow for user diversity. The adjacent land areas will be compatible and supportive of the water-based recreation although not completely dependent thereon. The project area contains three distinct geographical areas and these will each maintain a different character based on the different visitor uses provided, as well as the unique water and landscape features inherent in each.

The overall vision is that the project area will provide a range of uses and experiences classified as three general types (Active Recreation, Passive Recreation, and Primitive Recreation) based on the ability to accommodate visitors and the intensity of uses that occur there. O'Neill Forebay will remain and continue as the most actively used water body within the project area, with varying degrees of land-based recreation, while San Luis Reservoir will provide a more passive experience, and Los Banos Reservoir will provide more primitive area recreation uses. The land and water areas are further classified into management zones to further describe the resource goals and specific uses that can occur in each area. In all areas, the vision includes using state-of-the-art natural and cultural resource management tools to maintain and enhance the site-specific and regional biodiversity of the project area and to interpret and educate the public about these resources to assist in long-term stewardship.

3.2 GOALS AND GUIDELINES

This section presents project area policies in the form of Goals and Guidelines to guide use, development and management of Reclamation lands and for achieving the Declaration of Purpose and Vision Statement relating to all aspects of future project area management. The Plan uses goals and guidelines to address the opportunities and constraints for each planning area as outlined in Chapter 2.
The purpose of the Plan goals and guidelines, as defined below, are to present the desired future condition of the project area, based on the existing conditions, issues and associated opportunities and constraints and the ultimate alternative selected for implementing these policies:

Goal—General, overall, and ultimate purpose, aim, or intent which will direct management effort. Goals are not necessarily measurable except in terms of the achievement of component objectives.

Guidelines/Objectives—General set of parameters that provide a broad-based strategy and directions towards accomplishing goals.

This section is organized following the broad planning areas outlined in Section 2.3, Opportunities and Constraints, with abbreviations added to identify individual goals and for reference in Chapter 4:

- Resource Management (RES)
- Visitor Experience, Interpretation and Education (VIS)
- Local and Regional Planning (REG)
- Infrastructure and Operations (OPS)
- Water Operations (WA)

For each planning area, a series of goals is identified based on specific issues and needs, as well as the desired future condition based on the project area purpose and vision. These goals apply to the entire

project area. Each goal has guidelines and objectives to provide specific future actions that can be implemented to achieve goals in the future. Goals are numbered (e.g., RES-1) and referenced in the EIR to indicate which goals and guidelines mitigate environmental impacts. For each goal, one or more guidelines are provided to give direction in accomplishing the goal. Goals and guidelines provided herein are prepared to set the stage for achieving the desired future condition with current available information and data. It should be emphasized that it is impossible to anticipate all project area issues requiring guidance in the future. It is expected that as more research, data collection, monitoring, and reconnaissance takes place and more of the project area's features and activities are recorded, goals and guidelines may need to be adjusted or revised.

Resource Management (RES)

Resource management goals encompass all significant natural resource or physical elements found within the project area. These are the inherent values that make the area unique, and long-term stewardship is essential to ensure that these resources are sustained and preserved for the future. These resources have been defined and described in Chapter 2, Existing Conditions, and are presented in this section under the following categories:

- Scenic/Aesthetic (RES-S)
- Cultural/Historic (RES-H)
- Climate (RES-C)
- Hydrology/Water Quality (RES-WQ)
- Vegetation (RES-V)
- Wildlife (RES-W)

Scenic/Aesthetic (RES-S)

One of the strong characteristics of the project area is the open scenic vistas of undeveloped land and open water. The scenic qualities are perpetuated by the surrounding undeveloped landscape, consisting of open grassland that allows expansive vistas of the rolling terrain and adjacent Diablo range. Also, most shoreline areas allow for uninterrupted views of the open water from the three reservoirs. In some cases, such as at Los Banos Reservoir, the view from the north and south plateaus provide a vista opportunity to experience the water and adjacent landscape. Additionally, the layout and configuration of the built structures in the project area are clustered in succinct areas, reducing the sense of sprawl and visual clutter. Portions of the project area, especially near the dams and the operations facilities, contain many built structures with an engineered character. This contributes to the understanding of the site as a water storage and distribution facility in those areas. Recreation area signage can portray an image and identity for the project area and contributes to the aesthetic experience.

Goal RES-S1

- Preserve scenic vistas that overlook open land and water through the identification and definition of prime or key vista points and view sheds.

Guidelines

- Conduct a visual assessment of new structures and carefully site features within an identified view shed.
- Where feasible, avoid placement of new structures or other obstructions at or near key vista points and along uninterrupted shorelines and landscapes.

Goal RES-S2

- Maintain large expanses of open space free of visual and physical interruptions.

Guideline

- Minimize the development of new structures and reduce existing structures and other features that visually and physically fragment open space.

Goal RES-S3

- Ensure that new structures are architecturally compatible with their use as recreation facilities and are distinguishable from the water operations structures but in keeping with overall site character.

Guidelines

- Identify the architectural components (style) and other contributing elements that define the recreation use areas and site character and use this information as a checklist to ensure that new structures are in compliance.
- Where feasible, ensure that the mass and scale of new structures are compatible with the setting and do not dominate the surrounding landscape.

Goal RES-S4

- Identify a common and unified set of site-related details and materials (signage, gates, surface materials, fences, etc.) to ensure new facilities and infrastructure are compatible with the character of the site and are distinctive for recreation facilities.

Guidelines

- Minimize introduction of materials not in keeping with the local and onsite character.
- Design new details to be compatible with existing materials and finishes while creating a unified image for the project area recreation facilities.
- Develop a signage and wayfinding system that incorporates guidelines and standards for signage as well as the location, distribution, and frequency of signs.

Goal RES-S5

- Prevent aesthetic and environmental damage from duration and intensity of lighting and fixtures.

Guidelines

- Ensure that light fixtures are designed and placed only as needed and are in keeping with use and character. Minimize intensity by considering techniques such as low voltage fixtures and downlighting.
- Design lighting systems and facilities that minimize light pollution onsite and to neighboring areas.

Cultural/Historic (RES-H)

Cultural resources consist of significant and potentially significant prehistoric and ethnographic sites, historic and ethnographic resources, cultural material collections, and cultural landscapes. The project area includes an abundance of important cultural resources.

Goal RES-H1

- Protect and preserve significant prehistoric and historic resources, and collections within the project area, including those that may be undocumented.

Guidelines

- Complete and maintain the existing inventory, mapping system, and database for cultural resources within the project area.
- Provide for storage of collections and documentation and display of select cultural resources.
- Submit and complete site records to the State Historic Preservation Officer to establish and submit resources that may be eligible for inclusion in the National Register of Historic Places, the California Register of Historical Resources, or for listing and recognition under the Department's Cultural Resources Division, including under cultural landscapes.
- Prepare a project area Cultural Resources Management Plan that sets forth a process to record and document cultural resources and develop a long-range management and monitoring strategy. Such a strategy should evaluate alternatives such as preservation, stabilization, rehabilitation, or reconstruction of the project area's significant cultural resources.
- Evaluate potential cultural landscapes within the project area using National Park Service (NPS) guidance on cultural landscapes as outlined in *Protecting Cultural Landscapes*. Prepare Cultural Landscape Reports when deemed appropriate and necessary.
- Consult with the Department's cultural resource specialists when planning the construction of new facilities and uses.
- When new development or improvements to existing facilities are proposed and may impact cultural resources, the Department should consult the Secretary of the Interior's Standards for the Treatment of Historic Properties for guidance and compliance with regulations.

Climate (RES-C)

The effects of summer wind and heat are a limiting factor on visitor use of project area facilities and a safety issue. In winter, fog can limit access to the vicinity or certain locations within the project area. In the case of windsurfing, wind creates a prime location for the sport, attracting users from many locales throughout the state. In contrast, it can also fuel a dangerous wildland fire, increasing its intensity and duration and the resources needed to control it. Climatic factors need to be considered in the use and management of visitor facilities and resource protection and provided for in the design and planning of future activities.

Goal RES-C1

- Provide documentation and consider climatic data in the design and planning of visitor facilities and resource management tools and activities.

Guidelines

- Continue to design vegetative buffers in and around visitor facilities to provide shade and wind blocks.
- Ensure that any wildfire prevention planning uses the most accurate weather data collected onsite or in proximity to current conditions.
- Add wind warning lights to locations currently not covered by such notification and educate visitors about their use.
- Ensure that windsurfers can fully benefit from the project area winds through dissemination of wind data and safe water access.

Hydrology/Water Quality (RES-WQ)

The quality and quantity of surface water and runoff, groundwater, and natural hydrological patterns are integral to the project area's physical health, particularly since most of the recreation is water based. Water quality is variable at the project area, and is conditioned upon the quality of the source water, the operational parameters and size of the reservoir, and the intensity and type of recreation activities. Much of the native flora and fauna depends on the surface and subsurface waters on the site. Fish-stocking programs provide fishing opportunities for anglers in the region. In turn, visitor use would decrease if water quality were reduced. Hydrologic function is related not only to activities that take place in the project area but also to surrounding land uses, as the site contributes to the regional watershed and also receives runoff from adjacent parcels.

Goal RES-WQ1

- Ensure that existing, new, or increased visitor uses do not negatively contribute to water quality.

Guidelines

- Work with California Department of Water Resources (DWR) to continue existing water quality monitoring and document results for the planning and design of visitor facilities.

- Work with DWR to add monitoring at Los Banos Reservoir and increase monitoring in other locations as needed to accommodate future expansion, development, or increased use.

Goal RES-WQ2

- Minimize access to project area wetlands and other watercourses to prevent degradation related to trampling, surface runoff, and sedimentation.

Guidelines

- Provide key, well-marked visitor access points to wetlands and streams and provide interpretive signage to educate visitors about habitat sensitivity.
- Establish minimum buffers and site-specific guidelines for siting future campsites and associated facilities away from wetlands and watercourses.
- Minimize trail crossings over riparian corridors, and build bridges over such crossings where essential.
- With existing and increased horse-related facilities and uses, implement measures to reduce transport of pollutants from animal waste to wetlands and other watercourses.
- Provide native plantings for erosion control near degraded shorelines and riparian corridors.

Goal RES-WQ3

- Use water efficiently and reduce water demand.

Guidelines

- Employ water conserving design and fixtures in new construction, wherever possible.
- Use native plant materials and employ other water conserving techniques for landscaping.

Goal RES-WQ4

- Design, construct, and maintain buildings, roads, trails, campsites, boat launches and marinas, and associated infrastructure to minimize stormwater runoff, promote groundwater recharge, and prevent soil erosion.

Guidelines

- Consider seasonal requirements of aquatic plant and wildlife species, and plan any work that would result in shoreline alteration or riparian disturbance to avoid adverse impacts on these species where feasible. Follow DFG and other regulatory requirements for streambed alteration.
- Adhere to water quality protection standards and control measures available in the Central Valley Region Water Quality Control Plan (Basin Plan) for the region.
- Consult the Clean Water Act for current stormwater management guidelines and comply with National Pollution Discharge Elimination System (NPDES) requirements where applicable.

- Limit impervious surfaces to minimize runoff; consider the use of permeable materials for new or expanded pedestrian and vehicular surfaces.

Vegetation (RES-V)

The lack of vegetative data and sufficient monitoring contributes to limitations in planning and employing best management practices (BMPs) for long-term management of project area resources. Issues such as grazing, wildland fire, invasive species, and knowledge of special status species and communities need to be adequately addressed over the life of the Plan. Additionally, these issues need to comply with the appropriate and applicable laws to ensure environmental and legal compliance such as Director's Orders as administered by Reclamation.

Goal RES-V1

- Protect, maintain, and, where appropriate, restore the site's locally and regionally important native plant communities.

Guideline

- Prepare a vegetation management plan and map that provide for ongoing inventory of the project area's vegetation.
- Identify tools and techniques to manage vegetation, and define areas requiring restoration.

Goal RES-V2

- Document and protect special-status plants and communities and manage for their perpetuation and enhancement.

Guidelines

- Ensure actions comply with the State and Federal Endangered Species Acts and other applicable regulations aimed at the protection of special-status plant species when planning and implementing projects or management programs.
- Enhance existing inventories to further document and map locations of special-status species.
- Encourage the continuation of research and develop partnerships with research institutions and regulatory agencies to protect and enhance special-status species.

Goal RES-V3

- Control invasive and non-native species.

Guidelines

- Identify invasive and exotic species in the project area and prepare a management plan to control and/or remove these species over time.

- Avoid planting invasive and non-native species. As a rule, use locally native species that are defined as indigenous to the project area or closely surrounding areas.

Goal RES-V4

- Restore the project area's native grasslands through the use of BMP's.

Guidelines

- Develop a Vegetation Management Plan and continue to monitor plots for species composition and other parameters using appropriate methodologies, as long as grazing continues.
- Consult with experts and other agencies for information on the preservation of native grasslands.

Goal RES-V5

- Reduce the threat for urban and wild land fire and the associated danger to human life utilizing current techniques that meet federal and state standards.

Guidelines

- Develop and implement a comprehensive Fire Management Plan that addresses urban and wild land fire, consistent with the National Fire Plan.
- Monitor vegetative fuel loads using regional fire weather information and other fire ecology data to understand onsite fire danger.
- Devise a program to reduce vegetative fuel loads while supporting the protection of ecologically important and special-status species.

Wildlife (RES-W)

The large open, undeveloped lands within the project area contribute to the regional biodiversity by providing habitat for a variety of special-status and other species. Existing data reveal the presence of certain species with specific requirements for long-term conservation. Lack of a project area wildlife management plan as well as confirmed species existence may limit the ability to plan and build future visitor facilities. Wildlife management planning requires coordination and cooperation with other agencies, landowners, and stakeholders to include a regional approach and implementation. Additionally, coordination among project area managing agencies is essential to wildlife habitat conservation work involving agencies with different missions.

Goal RES-W1

- Maintain, protect, and enhance wildlife habitat for common, sensitive, and special-status wildlife species.

Guidelines

- Continue to document and monitor wildlife species and their use patterns across the site.
- Avoid significant impacts and minimize disturbance to critical wildlife habitat areas, including native grasslands, riparian, and native shoreline habitats.
- Before construction of facilities and trails, survey site-specific areas of potential impact for the presence of special-status species.
- Reduce wildlife access to human food and garbage by using wildlife-proof trash containers throughout the site, including administration and residence areas.
- Ensure that new facilities, land uses, and management activities are planned to avoid habitat fragmentation.
- Explore opportunities that will enhance wildlife movement through such proposals as an underpass at SR 152 that is designed to provide opportunities for terrestrial wildlife to cross safely.
- Periodically evaluate status of San Joaquin kit fox and other special status species on the project site through a focused survey using USFWS protocol to manage for species protection and the development of a future protection program.
- Avoid and minimize potential impacts on the kit fox and other special-status species through the maintenance of existing open, corridor areas for passage.
- Avoid direct construction-related impacts to special-status species and species of special concern by doing preconstruction surveys when development is located in or near areas of suitable nesting habitat.

Goal RES-W2

- Work with project area managing agencies and other stakeholders to prepare a project area-wide Wildlife Management Plan.

Guidelines

- Set up and maintain a project area database and keep current with known wildlife data and information.
- Review facilities planning and design plans to prevent habitat degradation and fragmentation.
- Continue attendance at Kit Fox Planning and Conservation Team (KFPACT) meetings and share information with fellow agency personnel.

Visitor Experience, Interpretation and Education (VIS)

The function of the project area lands is primarily for mixed use land and water-based recreation. Visitor experience goals and guidelines provide management direction for the way that visitors use the recreation lands and the facilities that support that use as well as the quality of the user experience. This is reliant upon visitor use, duration, and intensity data as well as demographic preferences. Additionally, the Department's mission for interpretation and education is to convey messages that initially help visitors value their experience, and ultimately foster a conservation ethic and promote a park constituency. Educational opportunities should be preserved and enhanced in the SRA offering activities that enable

students to investigate, research and participate in interactive learning. Based on the issues and opportunities and constraints defined and described in Chapter 2, Existing Conditions, goals and guidelines are presented in this section under the following categories:

- Visitor Uses and Facilities (VIS-F)
- Trails (VIS-T)
- Interpretive Themes (VIS-I)
- Concession Opportunities (VIS-C)

Visitor Uses and Facilities (VIS-F)

Visitor facilities have been developed on the project area lands since the 1970s, pursuant to the first general development plan. As the regional population has increased, the use of the facilities has also increased although based on seasonal limitations such as weather and water level fluctuations. The project area is the largest facility of its type within such short distance of the Bay Area and surrounding, rapidly growing communities. Similar water-based recreation is available at other Reclamation locations at San Justo Reservoir and Millerton Lake. Visitor use and facilities need to be planned and developed to accommodate growing populations while providing regional diversity and balancing the need to conserve natural and cultural resources. The adjacent Pacheco State Park provides an extensive trail network for hiking, horseback riding, and mountain biking, uses that are not as prevalent in the project area, and Henry Coe State Park, located northwest of the project area near Morgan Hill, provides extensive hiking and backcountry camping.

Goal VIS-F1

- Maintain and provide new visitor facilities and uses that enhance recreational enjoyment of the site's history and character and avoid resource degradation.

Guidelines

- Encourage boater safety through boating courses, monitoring, and enforcement of regulations that will also enhance visitor experiences.
- Explore the opportunity for a visitor center to orient and educate visitors to the site, as well as an increase in other, self-guided interpretive facilities such as weather-proof displays and signage.
- Plan for recreational opportunities within a regional context and in coordination with other plans (e.g., the Millerton Lake SRA Resource Management Plan (RMP), Pacheco State Park, and Merced County and Santa Clara County parks) to ensure that facilities are balanced within the region and are compatible with the location and resources.
- Provide for a variety of day-use activities and overnight camping facilities that celebrate the unique site characteristics and accommodate visitors of varying abilities. Also prepare a visitor facility management plan that incorporates visitor data, regional demographics, and resource data to support the need for type and intensity of visitor facilities.

Goal VIS-F2

- Provide adequate shoreline and upland support facilities and management at each reservoir and use area to address current and future demand for permitted recreational uses, consistent with management zones and natural and cultural resource goals and guidelines.

Guidelines

- Establish a program for collecting adequate recreation use and demand data to help determine the need and timing of new facilities.
- Maintain boater and aquatic safety education programs and improve overall water safety outreach for all users.
- Based on results of visitor use information, upgrade, renovate, and or reconfigure existing facilities (i.e., the existing boat ramp at Medeiros Use Area) to improve access and efficiency to alleviate demand during peak use.
- Ensure that campground and day use additions and improvements respond to and are prioritized based on user demand data.
- Design and locate new facilities to comply with Americans with Disabilities Act (ADA) requirements where possible.
- Pursuant to securing the appropriate Department and PRC authorization, explore the opportunity to allow hunting on certain portions of the SRA, consistent with Reclamation policy and DFG regulations.

Goal VIS-F3

- Manage water surfaces and use areas to accommodate a variety of different user groups and minimize resource competition and conflicts among users.

Guidelines

- Review recreation use and demand data to determine the level of enforcement needed to reduce user conflicts in different locations within the project area.
- Resolve water surface use conflicts utilizing a variety of methods, including seasonal and time of day restrictions and no wake or reduced speed zones.

Trails (VIS-T)

Trail use is not a primary activity on SRA lands; however, it is a primary activity on California Department of Fish and Game (DFG) managed wildlife areas. Opportunities exist to connect the SRA lands with adjacent and nearby recreation lands such as Pacheco State Park and other wildlife areas. Currently, there are gaps in trail connections that inhibit loop opportunities and access to certain areas. Water facility safety and security limit public access in some locations. The lack of an overall trails management plan and visitor use and demand data limits the prioritization of trail use and facility needs for the future. The project area contains many old, unpaved roads and trails that may provide opportunities for new use and linkages.

Goal VIS-T1

- Provide an appropriate amount and variety of trails in a range of locations throughout the project area as well as improved connectivity to the SRA from existing trails.

Guidelines

- Prepare a comprehensive project area trails management plan to identify future trail openings and connections and to determine single-use and multiuse options based on visitor experience and resource protection needs.
- Maintain a system of multiuse trails to avoid the need for too many trails.

Goal VIS-T2

- Ensure that trails are designed and used to preserve natural and cultural resources and provide the optimum visitor experience and do not contribute to habitat fragmentation or other site degradation.

Guidelines

- Develop and maintain trails for efficient maintenance, to minimize erosion, based on BMPs in keeping with resource management goals.
- Review areas of the project that are currently not accessible to the public to determine the best location for new trails or where existing trails can be used to minimize the blazing of new trails.
- Map wildlife corridors to minimize or avoid developing trails that bisect these corridors resulting in the fragmentation of habitat.
- Continue to map cultural resources and review these locations during trail development to prevent possible degradation.
- Incorporate existing trails or old roads into the comprehensive plan whenever possible to reduce vegetative clearing.

Goal VIS-T3

- Provide different types of trail experiences for a variety of trail users.

Guidelines

- Explore options for short and long-duration loop trails for hikers and cyclists, equestrians, and multiple users.
- Explore the options to retrofit existing trails and build new trails that are ADA compliant.
- Work with equestrians and analyze existing use to ensure adequate facilities where needed.
- Explore the best locations for linking with adjacent lands at Pacheco State Park and DFG-managed lands.

Goal VIS-T4

- Provide additional interpretive signage to allow for self-guided educational trails.

Guideline

- Supplement interpretive programs by adding additional interpretive signage at key locations for theme-based self-guided walks.
- Develop and implement a signage and public education program for safe use of multi-use trails.

Interpretive Themes (VIS-I)

Interpretive themes are those that provide public education about specific topics or elements found at the project area; they can be used to relay important messages about resource protection, site history, and other project area topics. Based on the location, history, previous inhabitants, as well as current resources and land uses, there are many interpretive opportunities within the unit. The following is the overall theme that best exemplifies the project area.

Goal VIS-II

Project Area Unifying Theme

- Human intervention created the San Luis Reservoir, O'Neill Forebay and associated water storage and distribution infrastrcuture, altering the natural environment and creating recreation opportunities.

Subtheme 1

- Connecting water collection with the region is an exploration of how and where the water comes from, how it is transported and how and where it is used. The need for water throughout California allowed for the development of the San Luis Reservoir.

Guidelines

- Interpret how water travels through the aqueduct systems and is stored at this location for use in the surrounding region.
- Interpret how the water is stored and transported for irrigation use and support of the agriculture industry by the state.
- Interpret the creation of the quarry to mine materials to build the dam and its alteration of the landscape.
- Interpret how the region receives less than 10 inches of rainfall per year despite the voluminous water stored at this location, and describe the wildlife species that are adapted to this environment.
- Partner with the Santa Clara Valley Water District (SCVWD) to describe how they use the water and the methods for retrieving and distributing the water.

- Interpret the construction processes necessary to create the dam, including the role of geology.
- Partner with DWR to maximize the use of the Romero Visitor Center and other water operation facilities for interpretive purposes.
- Interpret the creation of the quarry to mine materials to build the dam and its alteration of the landscape.
- Interpret the importance of maintaining a high level of water quality for recreation and consumption.

Subtheme 2

- Water provides a wide variety of recreational opportunities, but care must be taken when recreating. Explore how water provides specialized opportunities for recreation. Interpret the need for safety when recreating at this location.

Guidelines

- Interpret fishing at this location, including the breeding of fishes and how stocking the reservoir increases fishing opportunities such as the world-class large fish that are caught at this location,
- Interpret how the water provides relief from the summer heat and the importance of maintaining a high level of water quality.
- Interpret the wind and the role it plays in providing a world class windsurfing location.
- Interpret how wind can create dangerous conditions at this unit.
- Interpret the wind warning lights and how visitors should be aware of this system prior to participating in the recreational opportunities.
- Interpret other forms of active and passive recreation that occur there.
- Interpret how water safety is integral to enjoying the water for recreation purposes.

Subtheme 3

- Water has had a direct impact on human settlement in the area. Explore how human settlement was associated with water sources and the cultural clues that still remain in the landscape.

Guidelines

- Interpret the "Path of the Padres" at Los Banos Creek and how its precious year-round water flows supplied the first Anglo-American settlers.
- Interpret the uses of Los Banos Creek by Native American groups.
- Interpret the rich valley that existed and the sequence of human settlement.
- Interpret the cultural resources that exist in the valley and how they receive inundation based on the water flows at different times of the year.

Subtheme 4

- Wildlife species have adapted to the reservoir and made it home. Explore the flora and fauna, and the transition that has occurred prior to and since the creation of the reservoir.

Guidelines

- Interpret the impact the dam has had on the wildlife.
- Interpret the wildlife species that are adapted to this environment.

Subtheme 5

- Climatology impacts the natural and built environment.

Guidelines

- Interpret the unique factors that affect wind direction and speed in these locations.
- Interpret the way climate such as tule fog and wind shape the landscape.
- Interpret the geologic formations and their impact on wind.
- Interpret the benefits of wind generated energy.

Goal VIS-I2

- Provide a variety of interpretive and educational programs that celebrate the project area and the region's history and unique natural resources.

Guideline

- Enhance interpretive opportunities with a mix of programs (such as guided tours, campfire programs, lectures, school field trips, or other similar programs) and venues (interpretive signage, outdoor exhibits, rock quarry, visitor center and other similar venues).
- Partner with DWR to maximize the use of the Romero Visitor Center and other water operation facilities for interpretive purposes.

Concession Opportunities (VIS-C)

Goal VIS-C1

- Provide concessions that support the purpose and vision for the project area and enhance the visitor experience without compromising resource protection.

Guidelines

- Ensure that any concessions are adding to the capacity of project area staff and clearly implementing desired visitor programs beyond what the Department is capable of achieving.
- With the help of recreational user groups and concessionaires, craft concession plans that are based on visitor use and demand and serve a viable population to ensure success.
- Choose concessions that best exemplify the character and needs of the use area and enhance the ability to provide a quality visitor experience while meeting other Plan goals.

Local and Regional Planning (REG)

Local and regional planning encompasses coordination and cooperation with landowners, advisory boards, regulatory agencies, and municipalities in the vicinity of the project area. The land around the project area and visitors to the facilities and in the region are continually changing and can affect the use and condition of the project area. Issues and topics related to local and regional planning have been defined and described in Chapter 2, Existing Conditions, and are presented in this section under the following categories:

- Interagency Cooperation (REG-C)
- Regional Plans (REG-P)
- Population and Demographics (REG-D)
- Linkages (REG-L)

Interagency Cooperation (REG-C)

Outreach to and cooperation with sister agencies, adjacent landowners, and recreational user groups can greatly benefit the project area and its activities. Resource management implementation can be aided by sharing staff resources among different agencies. Issues that may be relevant to residents and land use in the project area vicinity, as well as regulatory requirements, can be clarified early in the process with continued public outreach.

Goal REG-C1

- Identify and cooperate with all adjacent landowners, local, state, and federal agencies to share resources and ensure coordinated implementation of project area management actions.

Guidelines

- Work with DFG to develop coordinated access to adjacent wildlife areas.
- Continue to work with California Department of Forestry and Fire Protection (CDF) for emergency, rescue, fire, or other incidents requiring mutual aid.
- Identify regulatory requirements and permits needed for project area actions and communicate early with the associated agencies to prevent review delays.
- Continue to update and maintain a database of all stakeholders identified from the planning process.

Goal REG-C2

- Maintain and enhance a cooperative working relationship with the core managing agencies including DWR, DFG, the Department, and Reclamation.

Guideline

- Continue the regular forum of information exchange initiated in the planning process to ensure that all agencies are aware of all issues and projects and how they affect project area resources and facilities.

Regional Plans (REG-P)

There are many efforts to accommodate the continuing population growth in the region; these are being documented in a variety of plans by local and state agencies. Additionally, many surrounding privately owned parcels are being subdivided and developed. Overlapping planning efforts can cause oversight of important issues relevant to project area planning, and surrounding land uses can greatly influence management and operations. There are also regional planning efforts that require continued information exchange to ensure they are coordinated with project area visitation and plan implementation.

Goal REG-P1

- Provide information to local governments on regional planning initiatives and surrounding development to assist in making them consistent with the project area purpose and vision.

Guidelines

- Regularly review applications to Merced or Santa Clara County for development in the vicinity of the project area and coordinate planning for common features such as access roads and related infrastructure.
- Review and comment where applicable on Merced or Santa Clara County General Plan updates and regional projects such as the high-speed rail and low-point improvement project.

Population and Demographics (REG-D)

Lack of detailed visitor attendance data can inhibit the planning of facilities and the anticipation of staffing needs and operations. Because of the project area location, it can serve coastal as well as Central Valley residents with varying recreational desires and abilities. Following the regional and local population and demographic data, documenting this information, and collecting visitor profiles will aid in future management of the recreational resources.

Goal REG-D1

- Consider visitor use data and apply the appropriate regional population and demographic information as it applies to design and construction in planning and construction projects at the project area.

Guidelines

- Enhance current visitor attendance data collection efforts to include more detail about visitor use, duration, satisfaction, volumes, and seasonality of visitation.
- Follow regional population and demographic reports such as the U.S. Census and countywide projections to ascertain future visitor needs and priorities.

Linkages (REG-L)

There is an opportunity for open-space and recreational linkages between the project area and the adjacent Pacheco SP, and between the project area and the nearby DFG lands, as well as opportunities for better connections to Los Banos Creek Use Area. Also, given the land uses on adjacent parcels, there may be an opportunity to connect undeveloped lands with the project area for trail linkages or wildlife corridors.

Goal REG-L1

- Explore the possibility for project area users to connect with adjacent and regional preserved lands, namely the adjacent Pacheco State Park, San Luis Wildlife Area (DFG), and Los Banos Creek Use Area.

Guidelines

- Work with Merced and Santa Clara County planners to plan an interconnected open-space system, where possible, in the vicinity of the project area.
- Coordinate trail planning work with Pacheco State Park and DFG.

Infrastructure and Operations (OPS)

Infrastructure and operations are at the core of a functional unit and are integral to meeting the project area purpose and vision and managing resources and visitor uses. Because future staffing and management structures may change, interagency and intra-district cooperation and sharing of personnel and resources can make it easier to ensure efficient operations and up-to-date infrastructure. With multi-agencies managing the project area lands, infrastructure and operations can be coordinated and shared to reduce costs and increase efficiency. Existing infrastructure and operations have been defined and described in Chapter 2, Existing Conditions, and are presented in this section under the following categories:

- Project Area Access and Circulation (OPS-A)
- Management Agreements (OPS-M)
- Staffing Needs and Facilities (OPS-S)
- Utilities (OPS-U)

Project Area Access and Circulation (OPS-A)

The various access points for all the use areas pose issues for safety, security, and staff efficiency, particularly for an emergency incident. The distance to Los Banos Creek Use Area greatly reduces response time and onsite staff presence. Users of San Luis Creek Use Area have a dangerous crossing of State Route (SR) 152 if turning left from the facility. Other safety issues exist at all locations throughout the project area. Opportunities exist to work with Caltrans to formulate short and long term planning for improving access. As visitor use increases, traffic issues, particularly the level of service on SR 152, will be further reduced and will exacerbate traffic on area collector roads. Internal circulation and parking

currently functions well; however, this may need to be reviewed as use increases. Staff and visitor access and circulation needs to be coordinated and maintained to optimize efficiency, security, emergency access, and enjoyment of the project area while providing for resource protection.

Goal OPS-A1

- Ensure safe, well-signed and efficient ingress and egress to existing use area, compatible with resource management goals.

Guidelines

- Work with Caltrans to identify immediate, short-term safety and signage improvements that can be made and ensure that these are incorporated into regional transportation plans and budgets.
- Review long-term infrastructure requirements needed to handle increased future use of the project area.
- Work with Caltrans to plan long-term safety and access improvements, such as an overpass at the entry of the San Luis Creek Use Area with limited access from Gonzaga Road.
- Explore the option of using only the Gonzaga Road entry to access existing facilities south of SR152 to avoid ingress and egress from highway.
- Explore the opportunity to access Los Banos Creek Use Area from an internal road off of Gonzaga Road or a limited access service road off I-5.

Goal OPS-A2

- Ensure adequate emergency access to new facilities or backcountry areas and reservoirs as necessary.

Guideline

- Work with surrounding landowners to clarify the ownership and location of adjacent offsite roads and the possibility to use these if needed. Ensure that emergency access for project area staff members and entities such as CDF for wildland fire access and other such uses is sufficient.

Goal OPS-A3

- Provide well-defined, safe use area entry points capable of handling all visitors and a variety of vehicles during peak-use days and all seasons.

Guideline

- Design improvements with up-to-date standards capable of handling current and future vehicular and safety needs. The entry points should respect the recreational character of the area and natural and cultural resources through elements such as minimization of road widths and use of appropriate surfaces.

Goal OPS-A4

- Ensure well-defined visitor access to all use areas with clear, consistent signage,

Guidelines

- Maintain and develop clear signage with a unified design for visitor access and orientation throughout the project area.
- Provide ADA-compliant facilities and recreational use access (e.g., trails) where practicable based on the site conditions.

Management Agreements (OPS-M)

Reclamation holds and maintains many agreements with different agencies to manage its lands and waters for distribution and with utility companies to maintain rights-of-way as needed. The agreement with the Department is essential to ensure long-term continuity providing recreation and resource management at this location. Original agreements date back several decades and may not reflect current on the ground conditions or legal requirements.

Goal OPS-M1

- Ensure that management and other agreements reflect the current conditions of the project area and meet the Plan goals and guidelines.

Guidelines

- Review all management and other agreements to update, renew, or revise to ensure compatibility with current needs and consistency with the Plan.
- Ensure that the language of agreements fits current management conditions and allows for joint Plan implementation.
- Ensure agreements require that both agencies meet regulatory requirements for changes, alterations, or additions to any structures and other proposed actions, as well other agency policies.

Goal OPS-M2

- Work with the Santa Clara Valley Water District to ensure that construction, maintenance, or other work related to their water distribution system does not interfere with project area operations or significantly affect resources or recreational use operations.

Guideline

- Set up an Inter-Agency Agreement or Memorandum of Agreement (MOA) to ensure a standard operating procedure for future construction, maintenance, and implementation of water distribution activities.

Staffing Needs and Facilities (OPS-S)

Efficient project area operations require adequate staffing and associated facilities. Currently, staff administration work takes place primarily at the SRA Administrative Offices. Based on the size and proximity of the different use areas, it is difficult to provide adequate operational facilities throughout the project area. Emergency and safety needs can assist in prioritizing the type and location of new facilities. The identification of long-term needs and plans for staff operations will prevent costly, piecemeal development. Staff responsible for day to day management of the project area lands, need to ensure compliance with inter-agency agreements and other state and federal laws prior to initiating Plan implementation.

Goal OPS-S1

- Provide permanent staff housing opportunities as needed to meet public safety needs at the SRA.

Guidelines

- Inspect current staff housing, and upgrade as necessary and seek opportunities for new housing locations, consistent with federal regulations.
- Ensure adequate office space, housing, and ranger station with maintenance workspace at Los Banos Creek Use Area to provide self-contained, onsite management and enforcement.
- Evaluate and adjust staffing needs when planning existing and new programs.

Goal OPS-S2

- Allow and promote opportunities for site-related researchers and seasonal interns.

Guideline

- Identify opportunities for providing housing or other needs that would attract and provide for researchers and seasonal workers.

Goal OPS-S3

- To the extent feasible, incorporate principles and practices of sustainability into the project area's facilities, improvements, and maintenance and operations.

Guidelines

- To the extent feasible, consider sustainable practices in building and site design, construction and maintenance, and operations. Sustainable principles used in design and management emphasize environmental sensitivity in construction, the use of nontoxic materials and renewable resources, resource conservation, recycling, and energy efficiency.
- Consult programs such as LEED (Leadership in Energy and Environmental Design) for development of facilities and site-related construction as a guide to sustainable building practices.

Goal OPS-S4

- Provide staff training programs, as necessary to inform managers of current laws and regulations that need to be complied with for project area management.

Guidelines

- Develop an Integrated Pest Management (IPM) Plan as per current state and federal standards to record and document practices related to pest management.
- Develop a Plan implementation guide that serves as a reference for future managers to map out requirements for project actions and future construction projects.

Utilities (OPS-U)

Utility infrastructure is generally adequate for the current facilities and uses. There are limitations for water distribution in some locations as well as lighting improvements needed in some areas. There is no comprehensive plan documenting the existing, as-built utility network or its adequacy within the project area. Improvements to existing facilities and new projects will require an understanding of the utility needs to determine their feasibility and cost. Utility work should be compatible with natural and cultural resource protection.

Goal OPS-U1

- Ensure the continuance of long-term infrastructure function of the project area.

Guidelines

- Devise a strategic plan for the installation of a water distribution system in areas such as Medeiros Use Area in collaboration with the local water district.
- Identify other utility needs and implement utility improvements comprehensively to avoid unnecessary site disturbance and expensive rerouting of utility corridors and junctions over time.

Water Operations (WA)

Water operations are managed by DWR and are the primary purpose of the existing facilities, particularly the reservoirs. Water level fluctuations are the result of water and energy demand based on climate and the seasons. Safety and security are essential components of water operations and energy production and must be considered. Water-dependent recreational opportunities can change based on water levels, and thus increase or reduce visitor experience. Certain facilities such as boat launches require staff intensive labor to respond to changes in water levels. Existing water operations issues and opportunities and constraints have been defined and described in Chapter 2, Existing Conditions, and are presented in this section under the following categories:

- Water Level Fluctuations (WA-E)

- Management Agreements (WA-F)

Water level fluctuations (WA-E)

Constraints in water levels can severely inhibit user ability and enjoyment, create user safety issues, change the biological composition of the shoreline, and result in water quality degradation (from exposure of sediment to wind and rain). Weedy vegetation can be controlled and managed to prevent encroachment into open pool areas. Sediment deposition is dependent on water flow as well as water level and can cause safety issues for use in certain areas. Information about water level changes, if transmitted in a timely manner to visitors, can help alert users of unfavorable conditions.

Goal WA-E1

- Explore opportunities and actions that can reduce the impacts of water level fluctuations to help maintain consistent conditions for water-based users.

Guidelines

- Examine the possibility of removing built-up sediment to maintain water levels even during times of peak water demand.
- Work with user groups and managing agencies to devise a method to reduce and remove weedy vegetation from inhabiting water surfaces, consistent with natural and cultural resource objectives.
- Set up a system of transmitting timely and accurate water level information available through the Internet to reach a broad audience.

Operation of dam and power facilities (WA-F)

Recreational use areas are interspersed throughout the project area amongst a variety of water operation-related facilities. It is not always clear what areas are open to the public, and some areas are not secured for nonpublic access. Additionally, access around certain water operation facilities is not consistent for all users. Safety and security need to be enforced and visitors need to be kept informed of the importance of adhering to access restrictions.

Goal WA-F1

- Devise a clear, multi-agency plan for access in all areas, compatible with state and federal safety and security requirements.

Guidelines

- If public access is to be limited or not permitted, ensure proper signage, fencing, or other means to convey this information to visitors.
- Identify areas requiring additional security improvements to assist managers in enforcing access.
- Determine areas where jurisdiction is not clear and define the roles of the managing agencies.

- Set up standard operating procedures between Reclamation and the managing agencies to enhance operations and efficiency.

3.3 MANAGEMENT ZONES

Management zones in this Plan describe the overall management purpose and intent for future use within specific areas of the project area. The creation of management zones helps project area managers to focus activities and facilities in locations that are environmentally and logistically suitable. Map 6 illustrates project area management zones. The proposed zones for the project area are broken down by land- and water-based facilities and uses as follows:

Land-Based Management Zones

- Administration and Operations Zone (AO)
- Frontcountry Zone (FC)
- Backcountry Zone (BC)

Water-Based management Zones

- Rural Natural Zone (RN)
- Rural Developed Zone (RD)
- Suburban Zone (SU)

Table 3-1 summarizes all land within the project area by management zone, location, and acres. The description of the management zones below includes each zone's unique characteristics and the key existing features that are intended to be considered and incorporated into future plan implementation. Management zones provide a basis for the direction of the type and intensity of development and use within each area. Land areas have been designated according to current uses and facilities, and existing information known about future use and resource management.

Table 3-1
Project Area Management Zones

MANAGEMENT ZONES/PROJECT AREA	LOCATION	ACRES
Administration/Operations Zone		
San Luis Reservoir	Northeast side of San Luis Dam	1,231
Los Banos Creek Use Area	East side of Los Banos Reservoir	128
	Subtotal	1,359
Frontcountry Zone		
Basalt Use Area	Southeast corner of San Luis Reservoir	1,085
Dinosaur Point Use Area	West side of San Luis Reservoir	284
San Luis Creek Use Area	West side of O'Neill Forebay	473
Medeiros Use Area	South side of O'Neill Forebay	507
Los Banos Creek Use Area	Northeast side of Los Banos Reservoir	238
Off Highway Vehicle Use Area	South side of Gonzaga Road, east of Headquarters office	150

	Subtotal	2,737
Backcountry Zone		
Basalt Use Area	Southeast and portion of western shore of San Luis Reservoir to edge of Dinosaur Point Use Area	2,275
Dinosaur Point Use Area	Northwestern shore of San Luis Reservoir and north of SR 152 east of Upper Cottonwood Wildlife Area	905
San Luis Wildlife Area	Northwest of Dinosaur Point Use Area (DFG-managed land)	861
San Luis Creek Use Area	West of San Luis Creek FC Zone and along SR 152 and north and northeast shore of O'Neill Forebay	792
Medeiros Use Area	South of Medeiros FC Zone and north of SR 152	568
O'Neill Forebay Wildlife Area	East side of O'Neill Forebay (DFG-managed land)	621
Los Banos Creek Use Area	North and south of Los Banos Reservoir	1,777
	Subtotal	7,799
Rural Natural Zone		
San Luis Reservoir	Includes reservoir surface area at full pool elevation	2,355
Los Banos Reservoir	Includes reservoir surface area at full pool elevation	83
	Subtotal	2,438

Table 3-1 Project Area Management Zones		
MANAGEMENT ZONES/PROJECT AREA	LOCATION	ACRES
Rural Developed Zone		
San Luis Reservoir	Includes reservoir surface area at full pool elevation	10,612
O'Neill Forebay	Includes reservoir surface area at full pool elevation	740
Los Banos Reservoir	Includes reservoir surface area at full pool elevation	402
	Subtotal	11,754
Suburban Zone		
O'Neill Forebay	Includes reservoir surface area at full pool elevation	1,468
TOTAL ALL ZONES		27,555 ACRES

NOTES:

1. The total acreage may not match total acres owned and or managed be each agency due to boundary variations maintained by each agency.

2. The total acreage does not match acreage contained within the "project area" boundary shown on the GIS maps as this boundary was created to follow road edges in some locations.

3. Full pool elevations taken from USGS quad sheets.

4. The San Luis Reservoir AO Zone includes all land within the "joint use area" as well as additional land managed by the Department.

5. O'Neill Forebay Wildlife Area BC Zone does not include all land within the Wildlife Area. Some land area (234 acres) is utilized for water operations and is within the "joint use area" and designated as AO Zone.

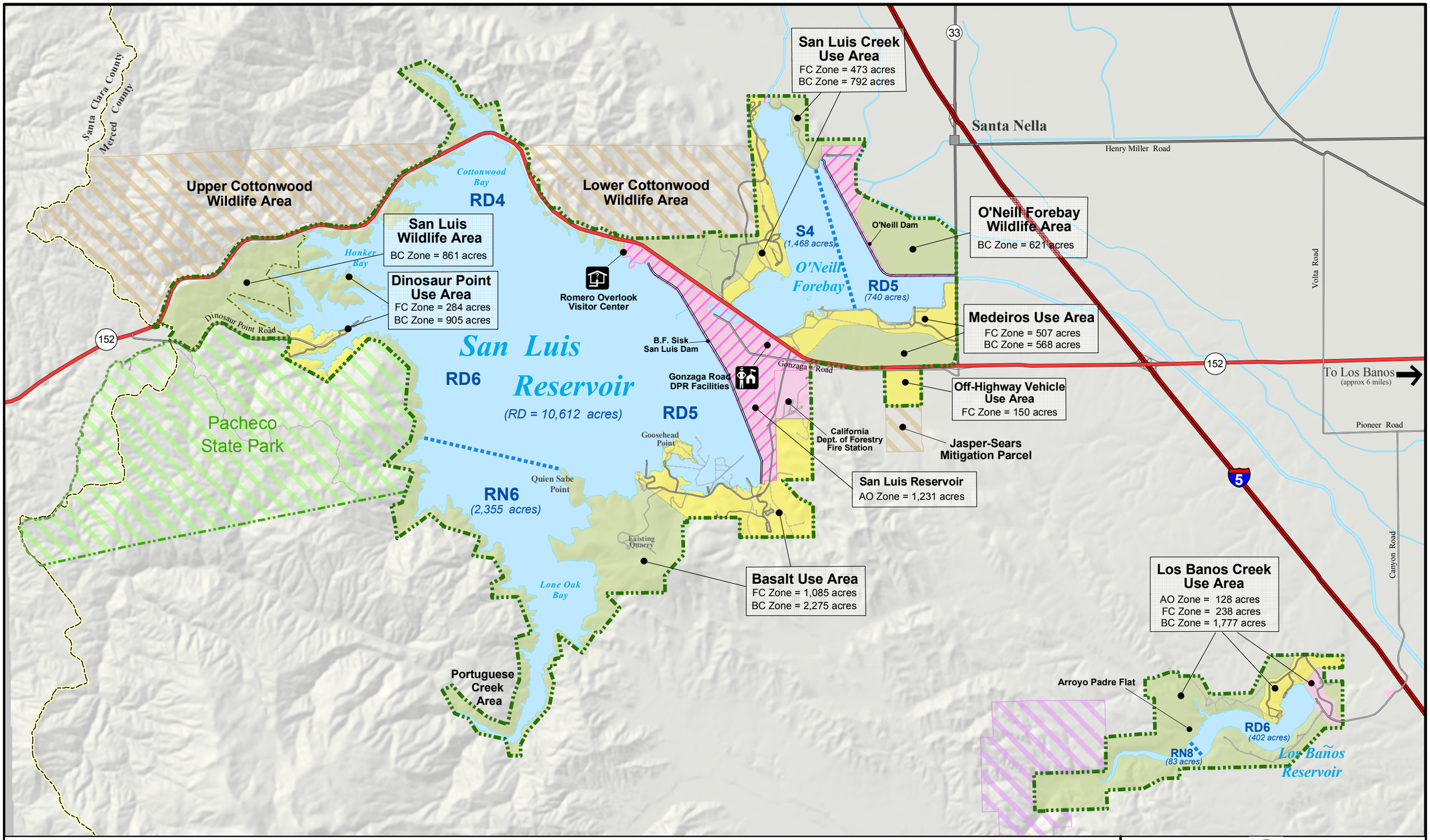
The water surfaces in the project area have management zones based on a planning inventory known as Water Recreation Opportunities Spectrum (WROS) (Aukerman, Haas, 2003), which rates physical, social (visitor use), and managerial attributes to classify recreational water bodies for the purpose of developing current and future management strategies. The WROS designations were made based on site visits and inventories conducted during the planning period. Map 6 shows the layout and area of the proposed management zones. Natural and cultural resources exist in all zones within the project area and, as described below, shall be protected and managed as part of the future development. For each management zone, the definition includes the following description:

- Existing Features
- Purpose and Intent
- Resource Goals
- Land Use

Administration and Operations Zone (AO)

Existing Features

The Administration and Operations Zone (AO) is the smallest of the proposed management zones. This zone encompasses approximately 1,231 acres near San Luis Reservoir and 128 acres at Los Banos Reservoir. This zone includes lands known as "joint use" areas, which defines lands that are managed by DWR for water operations and by the Department for recreation. There is an area of joint use at



Source: USGS DRG / EDAW, 2002

1 0.5 0 1 2 Miles

Scale 1 : 79,200
1" = 1.25 miles

N

4/20/05

EDAW

Land Management Zones

- Administration & Operations (AO)
- Frontcountry (FC)
- Backcountry (BC)

Water Recreation Opportunity Spectrum Classification (WROS)

- Class Boundary

Class Codes

- S -- Suburban
- RD -- Rural Developed
- RN -- Rural Natural

Other Ownership Status

- Joint Use Area
- Pacheco State Park
- DFG owned and managed
- DWR owned

Boundaries

- Project Area

San Luis Reservoir State Recreation Area

MAP 6 Management Zones

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O'Neill Forebay; however, this is strictly for DWR operations and no new uses or activities are proposed (it is not managed for recreation). Within the joint use areas at San Luis and Los Banos reservoirs, there is no specific boundary between the Department and DWR managed lands. However, based on the location of existing infrastructure and facilities, agency staff are clear about the jurisdiction of the land.

The San Luis Reservoir AO Zone contains several built structures, most notably the dam, operating facilities for DWR and the Department, as well as the CDF Fire Station. The zone is accessed from SR 152 and is partially visible from the highway or can be accessed from Gonzaga Road. The location, current activities, and existing buildings and infrastructure make this part of the project area a strategic place for this zone. This zone is the most developed portion of the project area and appears to be primarily used for water operations rather than for recreation. There are portions of the landscape that are open and generally undeveloped within the AO Zone; these areas currently contain no visitor facilities except for small parking areas with interpretive signage, access roads to other use areas, and chemical toilets.

The Los Banos Reservoir AO Zone contains Los Banos Dam and associated water operations facilities. Minimal buildings exist in this zone. Most visitors using the recreational facilities and boating access into the Los Banos Creek Use Area must check in at the Department-managed entry station structure. The zone also includes some open and undeveloped areas, as well as a wetland area that is located along and crossing the main access road. Generally, most of the landscape within this zone has been altered by the construction of the dam.

Purpose and Intent

The intent of the AO Zone will be to keep the project area's administrative, operational, and maintenance activities clustered together and to provide for the separation of staff work areas from public use areas. Accordingly, administrative offices, work areas, equipment and materials storage, and staff parking and housing areas will be located in the AO Zone. Public access to this zone is permitted, but it is limited and intended to enable the public to gather information and seek assistance or law enforcement, if necessary. Additionally, these areas will allow the public access to guided interpretive tours of water resources facilities. Open, undeveloped land is limited in this zone, therefore resource management will be focused on activities that support the existing operations yet remain consistent with efforts on other project area lands.

Resource Goals

The resources in the two areas of the AO Zone include cultural resources, open grassland, wetlands and associated riparian vegetation, and cultural landscape elements such as the dams and associated water operations features. Future development in this zone should respect and protect these resources through visitor education and interpretation, and management of the natural resources to protect their integrity. The scale and dominance of the dams are a testament to the engineering ability to alter the landscape and are features that contribute to the cultural landscape. Natural resource management in these areas needs to be in keeping with the dams' predominant function and needs to include security and any engineering requirements necessary for water operations.

Land Use

Activities in the AO Zone will include the majority of the project area staff' administrative, operations, and maintenance activities, as well as limited staff-supported public uses. Staff activities will include staff management, operations and maintenance activities, vehicle and equipment storage, and staff housing. Visitor use in the AO Zone will be limited to guided walks to experience the cultural landscape features and associated buildings, visitor information and orientation, and interpretive signage. Tables 3-2 and 3-3 summarize San Luis Reservoir and Los Banos Creek Use Area AO Zone land uses.

Table 3-2
San Luis Reservoir Administrative and Operations Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
SRA Administrative Offices	X	X	X	X
Maintenance and vehicle storage	X	X	X	X
Office/meeting space	X	X	X	X
Chemical toilets	X	X	X	X
Exhibit area/visitor center	-	X	X	X
Staff/Intern housing	X	X	X	X
Joint use area for water operations (DWR Facilities)	X	X	X	X
San Luis Dam	X	X	X	X
Staff intern housing	X	X	X	X
CDF fire station	X	X	X	X
Limited utilities	X	X	X	X
Cultural resources collections	X	X	X	X
Visitor Center	-	-	-	X
Interpretive displays	X	X	X	X
Interpretive signage	X	X	X	X
Wetlands and riparian vegetation	X	X	X	X
Special status species habitat	X	X	X	X
Open grassland	X	X	X	X
Coordinate with DWR for interpretive programs	-	X	X	X
Uses				
Visitor information	X	X	X	X
Guided walks of dam	-	X	-	-
Resource management	minimal	minimal	X	X

Table 3-3
Los Banos Creek Use Area Administrative and Operations Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Facilities/Infrastructure				
Entry station	X	X	improve flooding	X
Los Banos Dam	X	X	X	X
Limited utilities	X	X	X	X
Special status species habitat	X	X	X	X
Wetlands and riparian vegetation	X	X	X	X
Open grassland	X	X	X	X
Cultural resources	X	X	X	X
Ranger station	-	-	X	-
Staff housing	-	-	X	-
Maintenance facility	-	-	X	-
Uses				
Visitor information and orientation	X	X	X	X
Guided walks	-	X	X	X
Interpretive display	-	X	X	X
Resource management	minimal	minimal	X	X

Frontcountry Zone (FC)

Existing Features

The Frontcountry Zone (FC) encompasses approximately 1,650 acres throughout the project area and each of the existing use areas contains land in this zone. For each of the use areas, the FC Zone is the area where most of the existing visitor facilities currently exist. The Basalt Use Area FC Zone consists of 1,085 acres and the entrance is off of SR 152 or Gonzaga Road. The Dinosaur Point Use Area FC Zone is located where Dinosaur Point Road terminates at the western edge of San Luis Reservoir, and consists of 284 acres. The approximate 473 acres San Luis Creek Use Area FC Zone is located along the western shoreline and immediately adjacent to and upland of O'Neill Forebay.

The Medeiros Use Area FC Zone consists of 507 acres and is located along the southern shoreline, immediately adjacent to and upland of the forebay. The Los Banos Creek Use Area FC Zone encompasses developed lands along the northwest shore of Los Banos Reservoir and consists of 238 acres. The OHV FC Zone, part of the SRA that is managed by the Department, is located south of Gonzaga Road, approximately 2 miles from the Department's SRA Administrative Offices. This is an open flat grassland parcel consisting of 150 acres that is partially developed with an Off Highway Vehicle (OHV) track.

These FC Zones were defined based on the presence of existing roads as well as camping, parking, boat launching, and other visitor facilities. These are the most active visitor use areas within the land-based management zones and where the largest concentration of visitors will congregate. Many of these areas

have open landscape expanses consisting of grassland vegetation as well as sheltered, planted areas with native and non-native species to protect users from the summer winds and heat. In all cases, these zones have a direct physical connection to the water as well as open and framed views of the associated reservoir. During times of low water levels, fishermen drive along extensive, exposed shoreline areas to reach the water and fish from the shore. The terrain in most FC Zone areas (except Los Banos Creek Use Area, San Luis Creek Use Area and Dinosaur Point Use Area), is relatively flat where existing facilities are located; however, adjacent undeveloped potions of the FC Zones contain rolling terrain with limited areas of isolated steepness.

Purpose and Intent

The intent of the FC Zone is to provide visitor information and project area orientation with the most active visitor activities clustered within and around the existing developed portions of each zone. New visitor restroom facilities, campsites, concessions, recreational vehicles and horse trailers, and expanded day-use facilities will all be located within this zone. Additionally, if a new visitor center is not incorporated within the AO Zone because of unforeseen constraints, it can be sited within the FC Zone. The intent is also to cluster proposed development within and around the existing development to ensure that large expanses of open space are left in a natural state and that existing open vistas remain uninterrupted.

Resource Goals

The resources associated with this zone are native vegetation, wildlife habitat, streams, rolling topography and scenic, open vistas and cultural resources. Future development in this zone should respect and protect these resources through minimal disturbance, and sensitive siting and architecture of new structures. New facilities should be clustered in and around existing development, and sprawl into undeveloped portions of the zone should be prevented. Development along the shoreline areas should be limited to avoid physical and visual interruption of open water views. Native vegetation and indigenous species should be planted, where possible, where new plantings are proposed and to replace dead or dying trees.

Land Use

The FC Zone will accommodate the majority of the visitor facilities and activities, and active uses such as camping and any future concessions. This zone is where visitors will first be oriented to the project area and then embark on their choice of recreation. Visitor options available in this zone include use of trails for horses, hikers, or mountain bikers; departure to camps in the Backcountry (BC) Zone; camping for tents and recreational vehicles as well as group camps; and day uses such as guided walks, interpretive programs, and nature study and research. Visitor use in this zone will be the most intensive of any zone in the project area, but it will be focused in designated areas. See Tables 3-4 through 3-9 for a summary of FC Zone activities in each of the designated areas.

Table 3-4
Basalt Use Area Frontcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Entry station	X	X	X	X
Boat launch	X	X	X	X
Shoreline/riparian habitat	X	X	X	X
Vehicular and trailer parking	278/156	278/156	278/156	278/156
Campground (no hook-ups)	79 tent/RV	re-configure for larger RV's	X	re-configure for larger RV's
Campground w/ hook-ups	-	-	30 RV sites	-
Group camp		X	1 group site for up to 60 persons	1 group site for up to 60 persons
Campfire center/outdoor gathering area	X	X	upgrade	X
Restrooms (flush toilets)/showers	X	X	X	X
Chemical toilets	X	X	X	X
Interpretive programs	X	X	X	X
Concessions	-	X	X	X
Information boards	X	X	X	X
Wind warning light	X	X	X	X
Trailhead to Pacheco State Park	-	-	X	-
Cycling/fishing on dam	-	-	X	-
Trails/interpretive signage	X	X	X	X
Cultural resources				
Trailhead to Los Banos Creek Use Area	-	-	-	X
Special status species habitat	X	X	X	X
Uses				
Hiking	X	X	X	X
Birding	X	X	X	X
Fishing	X	X	X	X
Tent and RV camping	X	X	X	X
Cycling	-	-	X	-
Resource management	minimal	minimal	X	X

Table 3-5
Dinosaur Point Use Area Frontcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Boat launch	X	X	expanded	expanded
Vehicular and trailer parking	123	123	123	123
Shade ramadas	5	5	+30	+30
Shoreline/riparian habitat	X	X	X	X
Campground	-	-	30 tent	30 tent
Chemical toilets	X	-	-	-
Restrooms (flush toilets)	-	X	X	X
Concessions	-	X		
SCVWD Facilities	X	X	X	X
Wind warning lights	X	X	X	X
Information board	X	X	X	X
Trail link to San Luis Wildlife Area and Pacheco State Park	-	-	X	-
Trailheads to adjacent areas	-	-	X	-
Cultural resources	X	X	X	X
Marina	-	-	X	X
Access to Honker Bay	-	-	X	X
Street Luge	permit basis	-	permit basis	permit basis
Uses				
Day use	X	X	X	X
Special events	X	X	X	X
Fishing	X	X	X	X
Hiking	X	X	X	X
Cycling	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-6
San Luis Creek Use Area Frontcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Area entry station and drive	X	X	X	X
Group camping area	X	X	X	X
Boat launch	X	X	expanded	expanded
Boat dock	-	X	X	X
PWC launch area	-	-	X	-
Child fishing area	-	-	X	-
Group picnic facility	-	-	2@25 person 2@50 person 1@75 person	-
Campground w/water and electric	53 tent/RV	+30 tent	+30 tent	+30 tent
Dump station	X	X	X	X
Swimming beach	X	X	X	X
Chemical toilets	X	X	X	X
Restrooms (flush toilets/showers)	X	X	X	X
ADA fishing access	-	X	X	X
Shade ramadas	X	X	X	X
Sheltered gathering area	-	X	X	X
Marina	-	-	X	X
Concessions	-	camp store	kayak, boat, food service	kayak, boat, food service
Connector trails	-	X	X	X
Wind warning light	X	X	X	X
Lifeguard stand	X	X	X	X
Natural shoreline	X	X	X	X
Open landscape	X	X	X	X
Cultural resources	X	X	X	X
Special status species habitat	X	X	X	X
Uses				
Group special events	X	X	X	X
Day use	X	X	X	X
Group camping	X	X	X	X
Tent and RV camping	X	X	X	X
Hiking	X	X	X	X
Fishing	X	X	X	X
Windsurfing	X	X	X	X
Retail (camp supplies)	-	X	X	X
Resource management	minimal	minimal	X	X

Table 3-7
Medeiros Use Area Frontcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Entry station and drive	X	X	X	X
Shade ramadas	42	42	42	42
Informal parking areas	300	300	300	300
Campground (Informal)	42 tent/RV 100 primitive	42 tent/RV 100 primitive	42 tent/RV 100 primitive	42 tent/RV 100 primitive
Boat launch	(not open)	(open)	(expand)	(expand)
Chemical toilets	X	X	-	X
Restrooms (flush toilets)	-	-	X	-
Windsurfing launch area	X	-	X	-
Wind warning light	X	X	X	X
Water-themed interpretive program	-	-	-	X
Wetland Demonstration Area	-	-	-	X
Water-based child's play area	-	-	-	X
Natural shoreline	X	X	X	X
Special status species habitat	X	X	X	X
Uses				
Windsurfing	X	X	X	X
Tent camping	X	X	X	X
RV camping (self-contained)	X	X	X	X
Fishing	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-8
Los Banos Creek Use Area Frontcountry Zone
Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Boat launch	X	X	X	X
Campground (no hook-ups)	14 tent/RV	+30 tent	+30 tent	+50 tent
Restrooms (flush toilets)	-	X	X	X
Chemical toilets	X	X	X	X
Natural shoreline and riparian vegetation	X	X	X	X
Special status species habitat	X	X		
Horse camp	X	X	X	X
Path of the Padres	X	X	X	X
Radio controlled airplanes	X	X	X	X
Fishing	X	X	X	X
Internal access road	-	-	-	X
Ranger station	-	-	X	-
Staff housing	-	-	X	-
Maintenance facility	-	-	X	-
Uses				
Hiking	X	X	X	X
Swimming	X	X	X	X
Tent camping	X	X	X	X
Horseback riding	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-9
Off Highway Vehicle Use Area Frontcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Open grassland	X	X	X	X
OHV track	X	X	X	expanded
Interpretive Signage	X	X	X	X
Access road from Los Banos Use Area	-	-	-	X
Special status species habitat	X	X	X	X
Uses				
OHV riding	X	X	X	X
Resource management	minimal	minimal	X	X

Backcountry Zone (BC)

Existing Features

The Backcountry Zone (BC) covers the most land acreage in the project area with a total of 7,800 acres divided into seven areas. Two of these are defined by DFG-managed wildlife areas. San Luis Wildlife Area at the western edge of San Luis Reservoir consists of 861 acres. This is accessible via Dinosaur Point Road and has a separate parking area. There is no motorized access except for authorized vehicles and this parcel contains steep slopes as it sits on the edge of the Diablo Range.

O'Neill Forebay Wildlife Area BC Zone, on the eastern shore of the O'Neill Forebay, contains 621 acres and is accessible via SR 33. The area includes its own parking area and trail access, as well as riparian vegetation and flatter, wetland areas. Both of these areas are managed by DFG with its mission, rules and regulations, and designation as BC Zone. This area does not contain the portion of the O'Neill Wildlife Area that is used for water operations and designated as "joint use area."

The other five areas designated as BC Zone are adjacent to the FC Zone within each of the major use areas. The Basalt Use Area BC Zone consists of 2,275 acres, and is accessible through the FC Zone, and includes the land adjacent to the southeast and western shore of San Luis Reservoir, including the existing quarry. The main visitor facilities in this area are hiking trails.

The Dinosaur Point Use Area BC Zone, located along the northeastern shoreline of San Luis Reservoir and north of SR 152, and consists of 905 acres. This area is currently not utilized, as it is accessible only during low water levels via the Dinosaur Point Use Area FC Zone and from certain pull-off areas along SR 152. This BC Zone follows the shoreline closely except in the vicinity of Honker Bay where it flattens out and widens to form a peninsula-like landform. In general, it is linear in feature and consists of steep slopes to the water. Although this area is physically connected to the San Luis Wildlife Area, it differs from that area by the uses permitted.

The San Luis Creek Use Area BC Zone consists of 792 acres separated in two sub-areas, and is accessible via the adjacent FC Zone. The first area is west of the entry station, west of O'Neill Forebay, and is adjacent to Lower Cottonwood Wildlife Area. It acts as a transition between the wildlife area and the Department-managed SRA lands. A portion of the BC Zone also follows SR 152; however, it generally acts as open buffer land adjacent to the highway. The second area of the BC Zone in San Luis Creek Use Area is north of the forebay, accessible by boat and non-motorized trail only. South of the forebay and immediately north of SR 152 is the 568-acre Medeiros Use Area BC Zone, which is accessible via the adjacent FC Zone. This area is currently undeveloped and relatively flat. It contains a large buffer planting that visually separates it from the highway, as well as. a series of unpaved roads that lead to use areas along the shoreline in the FC Zone.

Los Banos Creek Use Area BC Zone contains a large portion (1,778 acres) of land surrounding Los Banos Reservoir. It consists of rolling and steep grassland terrain as well as flatter, shoreline areas with riparian vegetation. The portion of this zone south of the reservoir is accessible from a road off of the main entry road and before the entry station. This area is located at a higher elevation, and thus provides sweeping views of much of the reservoir and landscape to the northwest and south. The character of the BC Zone is among the most primitive within the project area, due to its remote location and the unaltered shoreline and wetland areas, particularly from about the middle of the reservoir to the southwestern corners of the project area. The BC Zone on the north side of the reservoir is accessible from the FC Zone primarily through non-motorized trails and from the water.

Purpose and Intent

The purpose of the BC Zone will be to keep a large portion of the project area in a wild and primitive state while allowing limited visitor access and enjoyment. Additionally, the intent is to maintain the vegetative species and natural, un-engineered character of the landscape. Accordingly, recreation facilities are limited but visitor access is extensive, consisting of hiking, horseback riding, mountain biking, backpack camping, nature study, and birding watching. In the DFG-managed wildlife areas, hunting is permitted by season and species and other restrictions as per the DFG code. The BC Zones will provide visitors with more quiet and passive experiences, with opportunities to be in a more wild landscape setting. Utilities and visitor services will be limited in this zone, based on remote access and costs associated with new infrastructure.

Resource Goals

The resources associated with this zone are the unfragmented expanses of native vegetation and wildlife habitat, wetlands, cultural elements, and scenic vistas. Future development in this zone should respect and protect these resources through continued inventory and research. In addition, land management activities should be aimed at reducing invasion by exotic species, degradation of shoreline and riparian areas, and habitat fragmentation. There should be sensitive siting of any future primitive campgrounds and associated structures. Because these are the largest blocks of undeveloped habitat in the project area, managers should ensure that fragmentation and degradation do not occur through haphazard maintenance activities, inappropriate placement of new facilities, and visitor overuse.

Land Use

Activities in the BC Zone will include a full array of resource management actions as appropriate, as well as the less intensive recreation uses and limited facilities associated with primitive camping and mixed use trails. Less intensive uses include fishing, self-guided interpretive walks, and other trail usage by mountain bikers, hikers, backpackers, horseback riders, bird watchers, photographers, researchers, students, and project area staff members. Resource management activities will be especially active in this zone and, in certain areas; prescribed fire may be used to manage wildland fires, in accordance with the recommendations of a fire management plan. Riparian restoration, exotic species removal, and wildlife habitat and corridor protection are other intended resource management activities. See Tables 3-10 through 3-16 for a summary of BC Zone land uses.

Table 3-10
Basalt Use Area Backcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Steep terrain	X	X	X	X
Quarry	X	X	X	X
Trails	X	X	X	X
Shoreline and riparian vegetation	X	X	X	X
Native vegetation and wildlife habitat	X	X	X	X
Backpacker camp	-	-	10 tent	-
Wind warning lights	X	X	X	X
Vault toilets	-	X	X	X
Trail link to Pacheco State Park	-	-	X	-
Cultural resources	X	X	X	X
Uses				
Hiking	X	X	X	X
Guided walks of quarry	-	-	X	-
Primitive camping	-	-	X	-
Horseback riding	X	-	X	-
Mountain biking	X	-	X	-
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-11
Dinosaur Point Use Area Backcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Steep terrain	X	X	X	X
Shoreline and riparian vegetation	X	X	X	X
Native vegetation and wildlife habitat	X	X	X	X
Campground	-	-	30 tent	30 tent
Cultural resources	X	X	X	X
Romeo Visitor Centers	X	X	X	X
Uses				
Hiking	-	X	X	X
Fishing	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-12
San Luis Wildlife Area Backcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/ Facilities				
Steep terrain	X	X	X	X
Vehicular parking	X	X	X	X
Trails	X	X	X	X
Native vegetation and wildlife habitat	X	X	X	X
Wetlands and riparian vegetation	X	X	X	X
Trail link to Dinosaur Point Use Area and Pacheco State Park	-	-	X	-
Uses				
Hunting (as per DFG regulations)	X	X	X	X
Hiking	X	X	X	X
Guided walks	-	X	X	X
Horseback riding	X	X	X	X
Mountain biking	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-13
San Luis Creek Use Area Backcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Boat-in camping area	X	X	X	X
Trails	X	X	X	X
Native vegetation and wildlife habitat	X	X	X	X
Shoreline and riparian vegetation	X	X	X	X
Vehicular access to Lower Cottonwood Wildlife Area	-	X	-	-
Uses				
Hiking	X	X	X	X
Camping	X	X	X	X
Mountain biking	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-14
O'Neill Forebay Wildlife Area Backcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Vehicular parking	X	X	X	X
Trails	X	X	X	X
Native vegetation and wildlife habitat	X	X	X	X
Wetlands and riparian vegetation	X	X	X	X
Special status species	X	X	X	X
Uses				
Hiking	X	X	X	X
Hunting (as per DFG regulations)	X	X	X	X
Guided walks	-	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-15
Medeiros Use Area Backcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Unpaved roads	X	X	X	X
Camping	200 primitive	200 primitive	+ 100 tent/RV +100 primitive	+100 tent/RV +100 primitive
Trails	X	X	X	X
Native vegetation and wildlife habitat	X	X	X	X
Uses				
Hiking	X	X	X	X
Guided walks	-	X	X	X
Tent and RV camping	-	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Resource management	minimal	minimal	X	X

Table 3-16
Los Banos Creek Use Area Backcountry Zone Land Use

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Steep terrain	X	X	X	X
Trails	X	X	X	X
Native vegetation and wildlife habitat	X	X	X	X
Shoreline and riparian vegetation	X	X	X	X
Vehicular connection to Gonzaga Road	-	-	-	X
Path of the Padres interpretive trail	X	X	X	X
Trail link to Basalt Use Area	-	-	-	X
Cultural resources	X	X	X	X
Uses				
Hiking	X	X	X	X
Guided walks	X	X	X	X
Horseback riding	X	X	X	X
Mountain biking	X	X	X	X
Radio-controlled plane flying	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Fishing	X	X	X	X
Resource management	minimal	minimal	X	X

Rural Natural Zone (RN)

Existing Features

San Luis Reservoir consists of approximately 12,967 water surface acres and 65 miles of shoreline of which 2,355 acres are designated as RN Zone based on the WROS system. The RN Zone is accessible primarily through the Basalt Use Area on the southeast side of the reservoir (location of boat launch and several access points) and Dinosaur Point Use Area (location of a boat ramp). The shoreline in the RN Zone is irregular and steep in some locations and consists of cove-like surfaces used for fishing. Views of the quarry along the southeastern shore are apparent from some portions of the RN Zone. The natural shoreline of the reservoir in the RN Zone provides more enclosure and less open pool area. This, along with the undeveloped edge, provides a quieter and more natural setting for boaters.

Los Banos Reservoir consists of approximately 485 water surface acres and 12 miles of shoreline, of which 83 acres are designated as RN Zone. It is the most undeveloped and primitive of the three reservoirs in the project area. It is accessible primarily from Los Banos Creek Use Area on the northeast side of the reservoir where a boat launch ramp and small beach area exists adjacent to a campground. The southern shoreline is generally steep, thus providing an enclosed feeling and preventing views of large water expanses at any one location. Further south and west, the areas become more primitive and wild, based on the surrounding undeveloped landscape, lack of visitor facilities, and natural riparian vegetation along the shore.

Purpose and Intent

The purpose of maintaining a RN Zone designation at these locations is to provide visitors to the project area with choices for a more primitive, rustic experience, relative to the three water-based locations here and within the region.

Resource Goals

The remote locations of the areas designated as RN Zone and the limited developed facilities provide an opportunity for a quieter, natural setting. At San Luis Reservoir, this is the only location for quieter fishing areas and to be away from the boating and other activities found in the main pool area. At Los Banos Reservoir, water quality is an important resource issue; currently water quality monitoring is not conducted on a regular basis. the lack of personal watercraft usage and the remote location of this facility aid in keeping water quality high due to reduced usage; however, quality will have to be periodically monitored over time and management strategies may need to be implemented to prevent degradation. The existing fisheries are dependent on high water quality and a specific temperature range, depending on the species (see Page 26). If recreational fishing is to be maintained, the habitat of existing fish species and the stocking programs will need to be managed and monitored.

Water Use

Boating and fishing are permitted in the RN Zone of San Luis Reservoir. The very southern portion of the RN Zone at San Luis Reservoir is a "no ski zone" limited to 10 mph. Activities in the Los Banos Reservoir RN Zone will include all existing activities, such as motorized boating; however, this will be kept

limited by the maximum speed limit of 5 mph. Water skiing, personal watercraft, and speed boating will not be allowed. Swimming and non-motorized boating will be permitted. See Tables 3-17 and 3-18 for a summary of RN Zone uses.

Table 3-17
San Luis Reservoir Rural Natural Zone
Water Uses

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Swimming access	X	X	X	X
Natural shoreline	X	X	X	X
Riparian vegetation	X	X	X	X
Water quality monitoring	X	X	X	X
Cultural resources	X	X	X	X
Uses				
Fishing	X	X	X	X
Motorized boating (restricted)	X	X	X	X
Personal watercraft in limited areas	X	X	X	X
Waterfowl hunting (per regulations)	X	X	X	X
Wildlife viewing	X	X	X	X
Water quality monitoring	X	X	X	X
Nature study and research	X	X	X	X
Swimming	X	X	X	X

Table 3-18 Los Banos Reservoir Rural Natural Water Uses				
	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Shoreline and riparian vegetation	X	X	X	X
Swimming access	X	X	X	X
Access to Path of the Padres interpretive trail	X	X	X	X
Water quality monitoring	-	X	X	X
Special status species habitat	X	X	X	X
Cultural resources	X	X	X	X
Uses				
Motorized boating	X	X	X	X
Non-motorized boating	X	X	X	X
Fishing	X	X	X	X
Waterfowl hunting (per regulations)	X	X	X	X
Interpretive programs	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X

Rural Developed Zone (RD)

Existing Features

San Luis Reservoir consists of approximately 12,975 water surface acres of which 10,612 acres are designated as RD Zone. It is accessible primarily from Basalt Use Area on the southeast side of the reservoir (location of boat launch and several access points) and Dinosaur Point Use Area (location of a boat ramp). Based on the open and large pool of the reservoir, wind and hot sun can severely limit use of this water surface in the summer. The shoreline is irregular and steep in some locations. The large open expanse dominates the landscape and the scale of this surface can dwarf a small fishing boat. At low water levels, the large dam at the northeast face is exposed, further providing a sense of power and dominance. From certain locations in the reservoir, views of SR 152 can be seen. However, most views easterly and southerly are of water and an undeveloped landscape.

O'Neill Forebay consists of approximately 2,210 water surface acres and 14 miles of shoreline of which 740 acres are designated as RD Zone. It is mostly an open pool configuration with engineered edges at the dam and is suitable for active water sports such as water skiing and windsurfing. It is accessible from the Medeiros Use Area (location of an old boat ramp and the natural shoreline where campers set up to fish or be near to the water). The southern edge, adjacent to the Medeiros Use Area is somewhat naturalized with informal tent and RV campsites with day use areas.

Los Banos Reservoir consists of approximately 485 water surface acres of which 402 acres are designated as RD Zone. This Zone is accessible from the Los Banos Creek Use Area and contains the boat launch area and campground. Based on the configuration of the reservoir, oriented generally northeasterly to southwesterly with a curvilinear shoreline, the largest pool area exists immediately behind the dam in the north. This area is the most open, and the water surface narrows to the south and west.

Purpose and Intent

The purpose of this zone is to act as transitional use area between the more active areas of the O'Neill Forebay and the more primitive RN Zones at San Luis and Los Banos Reservoir. Due to the wind and sun limitations, as well as water levels during certain times of the year, use of the San Luis Reservoir will be more limited than at the forebay; however, it will be significantly more active than Los Banos Reservoir. Fishing and boating occurs in this Zone in all locations. Active uses such as personal watercraft except at Los Banos Reservoir, but these uses will be limited to certain areas based on speed limit constraints.

Resource Goals

Water quality is the most important resource issue in this zone. Currently, water quality monitoring is conducted on a regular basis except at Los Banos Reservoir. The existing fisheries are dependent on high water quality and an acceptable temperature range, depending on the species (see Page 26). If recreational fishing is to be maintained, the habitat of existing fish species and the stocking programs will need to be managed and monitored. The authority to manage fish and wildlife in California is relegated to the DFG. The Department and DWR will assist in managing and monitoring stocking programs.

Water Use

Activities in the RD Zone will include fishing, boating, personal watercraft, water skiing, and non-motorized boating, as well as the development of a marina at Dinosaur Point Use Area and re-opening of the boat launch at O'Neill Forebay, should they be needed at some point in the future. See Table 3-19, 3-20 and 3-21 for a summary of RD Zone uses.

Table 3-19
San Luis Reservoir Rural Developed Zone
Water Uses

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Boat launch (2)	X	X	X	X
Swimming access	X	X	X	X
Dam	X	X	X	X
Marina	-	X	X	X
Fish stocking	X	X	X	X
Water quality monitoring	X	X	X	X
Natural shoreline	X	X	X	X
Riparian vegetation	X	X	X	X
Cultural resources	X	X	X	X
Uses				
Fishing	X	X	X	X
Boat launching	X	X	X	X
Motorized boating (restricted)	X	X	X	X
Personal watercraft in limited areas	X	X	X	X
Waterfowl hunting (per regulations)	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Swimming	X	X	X	X
Fish Stocking	X	X	X	X

Table 3-20
O'Neill Forebay Rural Developed Zone Water Uses

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Boat launch (closed)	X	X	X	X
Water quality monitoring	X	X	X	X
Fish stocking	X	X	X	X
Shoreline and riparian vegetation	X	X	X	X
Uses				
Windsurfing	X	X	X	X
Personal watercraft	X	X	X	X
Swimming	X	X	X	X
Fishing	X	X	X	X
Water skiing	X	X	X	X
Motorized boating	X	X	X	X
Waterfowl hunting (per regulations)	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X

Table 3-21
Los Banos Reservoir Rural Developed Water Uses

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Boat launching	X	X	X	X
Shoreline and riparian vegetation	X	X	X	X
Swimming access	X	X	X	X
Dam	X	X	X	X
Fish stocking	X	X	X	X
Access to Path of the Padres interpretive trail	X	X	X	X
Water quality monitoring	-	X	X	X
Special status species habitat	X	X	X	X
Cultural resources	X	X	X	X
Uses				
Motorized boating	X	X	X	X
Non-motorized boating	X	X	X	X
Fishing	X	X	X	X
Interpretive programs	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X
Waterfowl hunting (per regulations)	-	X	X	X
Resource management	X	X	X	X

Suburban Zone (SU)

Existing Features

O'Neill Forebay consists of approximately 2,210 water surface acres and 14 miles of shoreline of which 1,468 acres are designated as SU Zone, and contains the most users of all three water surfaces in the project area. It is mostly an open pool configuration and is suitable for active water sports such as water skiing and windsurfing. It has been designated SU Zone based on the WROS system and is accessible primarily from San Luis Creek Use Area on the west side of the forebay (location of a boat launch, several access points, and a swimming beach near the day use areas and campgrounds). It is also accessible from Medeiros Use Area, where windsurfers launch in the southeastern corner of the forebay.

This area is the prime windsurfing launching area due to world class wind speed and direction; however, limitations from the fluctuating water level and weedy vegetation in the water curtail more extensive windsurfing activity. Windsurfers also drive close to the water, near the southeast shore, to set up camp, launch equipment, and use the shoreline to patrol their windsurfing peers in the water. Due to the wind and heat, as well as fluctuations in water levels, use will be more limited at San Luis Reservoir than at the forebay. Other dominant features of the forebay landscape include the wide and massive towers supporting power lines crossing the water about midway between SR 152 and the dam. In contrast to

the active uses, hard edges, and views of the highway, O'Neill Forebay also provides some quiet and secluded shoreline areas, some accessible only by boat or non-motorized trails.

Purpose and Intent

The purpose of this zone is to provide the most diverse activities amongst all three water surfaces in the project area, while complimenting land-based facilities. Although the water surface is zoned for active use, the shoreline areas will have different uses based on their location and existing character. Use of this area will be more than San Luis Reservoir and Los Banos Reservoir. It is intended to allow for active uses such as personal watercraft; however, these uses will be limited to certain areas based on speed limit distance constraints.

Resource Goals

Water quality is the most important resource issue in this zone. Currently water quality monitoring is conducted on a regular basis at this location. The large turnover of water through the forebay helps maintain the water quality. The existing fisheries are dependent on high water quality and an acceptable temperature range, which varies by species. If recreational fishing is to be maintained, the habitat of existing fish species and the stocking programs will need to be managed and monitored. Additionally, areas of natural shoreline will be protected and monitored for special status species and to promote suitable habitat for shoreline avian species.

Water Use

Activities in the SU Zone will include fishing, swimming, boating, personal watercraft, water skiing, and non-motorized boating and windsurfing as well as the development of a marina at San Luis Creek Use Area, should it be needed at some point in the future. See Table 3-19 for a summary of SU Zone uses.

Table 3-22
O'Neill Forebay Suburban Zone Water Uses

	EXISTING (NO ACTION)	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Features/Facilities				
Boat launch (2)	X	X	X	X
Marina	-	X	X	X
Water quality monitoring	X	X	X	X
Shoreline and riparian vegetation	X	X	X	X
Uses				
Windsurfing	X	X	X	X
Personal watercraft	X	X	X	X
Windsurf training and patrol	X	X	X	X
Swimming	X	X	X	X
Fishing	X	X	X	X
Water skiing	X	X	X	X
Motorized boating	X	X	X	X
Waterfowl hunting (per regulations)	X	X	X	X
Wildlife viewing	X	X	X	X
Nature study and research	X	X	X	X

3.4 ALTERNATIVES TO THE PROPOSED PROJECT

The National Environmental Policy Act (NEPA) regulations and the California Environmental Quality Act (CEQA) Guidelines require the description and comparative analysis of a range of reasonable alternatives that would avoid or substantially lessen one or more of the significant effects of the project analyzed in the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) (NEPA Regulations 40 CFR 1502.14; CEQA Guidelines Section 15126.6[c]). Although no significant impacts have been identified for the Plan (when considering the goals and guidelines that would be implemented with the Plan to avoid or limit potential environmental effects to a less-than-significant level), the following discussion is intended to inform the public and decision-makers of project alternatives that could be implemented and the relative environmental effects of each alternative. This section also includes analysis of the No Action/No Project Alternative, as required by NEPA Regulations (40 CFR 1502.14(c)) and CEQA Guidelines (Section 15126.6[e]).

The alternatives were developed through a variety of public and agency meetings and workshops and a documentation review and analysis of known existing conditions. All of the alternatives are based on a concept of maintaining use and facilities within the existing use areas and clustering new facilities in and around these areas to reduce encroachment into undeveloped lands within the project area. Although some alternative components allow for trails or other access into segments of the project area that are currently not being used, this has been kept to a minimum with the goal of preserving large blocks of native vegetation and wildlife habitat.

All three action alternatives developed to implement the Plan are designed to protect and preserve natural and cultural resources throughout the project area. Resource management activities are generally equal in resource protection across all alternatives; however, they include provisions for different ways to

accomplish resource goals. Also, in all three alternatives the project area-wide goals and guidelines provide for the Plan to be self-mitigating. The Preferred Alternative (3) provides a balance of additional visitor and operational facilities while still maintaining the essential character and resource base of the project area over time, providing more diverse opportunities for a wider range of people.

Based on the planning horizon of this Plan for the next 25 years, the Preferred Alternative can accommodate future demand of visitor facilities, through the provision for additional campsites, aquatic facilities, and expansion of other existing facilities and uses. The Preferred Alternative provides a range of the number of certain improvements; however, it does not require these facilities to be built unless there is a documented need and the ability to protect natural and cultural resources within the relevant regulatory framework. However, it anticipates and provides for the future population of visitors, preventing the need to continually alter and update the Plan to accommodate changing conditions.

An environmental evaluation of the three action alternatives considered during development of this Plan, as well as the No Action/No Project Alternative, is provided in Section 4.5. Alternatives 2, 3, and 4, based on differences within geographic locations are summarized in Table 3-23. Alternative 1, No Action/No Project Alternative is a continuation of the existing conditions that would continue as if the Plan were not adopted. Summaries of these conditions and features, in comparison with the Action alternatives can be reviewed in Tables 3-2 through 3-22 by management zone and geographic area. For each action alternative description, a discussion of its characteristics are presented by the five broad planning areas; resource management, visitor use and education, local and regional planning, infrastructure and operations, and water operations, including a description of differences between each alternative.

Table 3-23
Action Alternatives Summary by Use Area

USE AREA	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Basalt Use Area	--	Develop multi-use trail (hiking, cycling, equestrian) linking Basalt with Pacheco State Park including a backpacker's camp.	Explore trail opportunities linking Los Banos Creek Use Area to San Luis Reservoir and adjacent areas.
	Close Basalt Quarry for public access.	Allow guided tours of Basalt Quarry.	--
	Explore possibility of conducting guided tours of the dam.	Explore possibility of allowing cycling and fishing at the dam and continue allowing access to dams by foot (in cooperation with DWR and Reclamation policies).	Close access to dams for all users.
	79 tent/RV (same as existing) and reconfigure camping area and/or add sites to allow for larger RVs, and add full hook-ups.	79 tent/RV and reconfigure camping area and/or add sites to allow for larger RVs, and add full hook-ups; add a third loop for 30 RV campsites.	79 tent/RV and reconfigure camping area and add sites to allow for larger RVs, and add full hook-ups; add a third loop of 30 RV campsites.
	--	Add group camp to accommodate up to 60 people.	Add group camp to accommodate up to 60 people.
	--	Backpackers campground up to 10 tent sites	--
	Upgrade the existing campfire center at Basalt to accommodate regular programs and group events.	Upgrade the existing campfire center at Basalt to accommodate regular programs and group events.	--
Gonzaga Road Facilities Area	--	--	Construct a new visitor center.
Dinosaur Point Use Area	--	Develop trail linking Dinosaur Point to surrounding public areas.	--
	Expand boat launch.	Construct new marina if needed.	Expand boat launch; construct new marina if needed.

Table 3-23
Action Alternatives Summary by Use Area

USE AREA	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
	--	Explore ability to access to "Honker Bay" area via SR 152 for new campground (up to 30 tent sites).	Explore ability to access to "Honker Bay" area via SR 152 for new campground (up to 30 tent sites).
	Eliminate street luge.	Maintain street luge as permitted activity on case by case basis.	Maintain street luge as permitted activity on case by case basis.
Romero Visitor Center	Coordinate development of interpretive programs with DWR at Romero Visitor Center.	Coordinate development of interpretive programs with DWR at Romero Visitor Center.	Coordinate development of interpretive programs with DWR at Romero Visitor Center.
San Luis Creek Use Area	Provide boat dock, lifeguard stand, and ADA-accessible fishing area; provide trail from San Luis Creek DUA to San Luis Creek camping area.	Provide boat dock, lifeguard stand, and ADA-accessible fishing area; provide trail from San Luis Creek DUA to San Luis Creek camping area.	Provide boat dock, lifeguard stand, and ADA-accessible fishing area; provide trail from San Luis Creek DUA to San Luis Creek camping area.
	--	Separate launch area for personal water craft.	--
	--	Provide group picnic facilities (2 @ 25 people, 2 @ 50 people, and 1 @ 75 people).	--
	Add up to 30 tent sites at southwest shoreline for windsurfers.	Add up to 30 tent sites at southwest shoreline for windsurfers.	Add up to 30 tent sites at southwest shoreline for windsurfers.
	--	Construct marina.	Construct marina.
	--	Construct fishing area for kids.	--
	Camp store	Concessions (possibly including jet ski, kayak, boat rentals, and food service)	Concessions (possibly including jet ski, kayak, boat rentals, and food service)
	Provide shelter for group events and interpretive programs.	Provide shelter for group events and interpretive programs.	Provide shelter for group events and interpretive programs.

Table 3-23
Action Alternatives Summary by Use Area

USE AREA	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
	Provide hunter access at Lower Cottonwood Wildlife Area that avoids San Luis Creek entry station.	--	--
Medeiros Use Area	Enhance and reopen/re-locate boat launch.	Enhance and reopen/re-locate boat launch.	Enhance and re-open/re-locate boat launch.
	Maintain existing camping as is (42 tent/RV sites and 300 primitive)	Maintain existing camping as is; add up to 100 new tent sites and 100 primitive campsites	Maintain existing camping as is; add up to 150 new tent sites.
	--	Provide restroom/shelter for windsurfers; provide parking near the water.	--
	--	--	Develop water-themed interpretive program, including a wetland demonstration, and water-based children's play area.
OHV Use Area	Maintain as is; no expansion of this use.	Maintain as is; no expansion of this use.	Expand OHV use in current location.
Los Banos Creek Use Area	Exit off of I-5 at Canyon Rd. for limited access to Los Banos Creek Use Area.	Exit off of I-5 at Canyon Rd. for limited access to Los Banos Creek Use Area.	Internal road from Los Banos Creek to Gonzaga Road via the existing road adjacent to OHV Use Area.
	--	Construct a ranger station, staff housing, and maintenance facilities at Los Banos Creek.	--
	Maintain existing tent sites and explore opportunities for expanding campground for up to 30 tent sites.	Maintain existing tent sites and explore opportunities for expanding campground for up to 30 tent sites.	Maintain existing tent sites and explore opportunities for expanding campground for up to 50 tent sites.
	Maintain existing horse camp and "Path of the Padres" trail.	Maintain existing horse camp and "Path of the Padres" trail.	Maintain existing horse camp and "Path of the Padres" trail.

Table 3-23
Action Alternatives Summary by Use Area

USE AREA	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Transportation	Alterations to existing roadways, including improved turning lanes on SR 152 and SR 33 at project area entry points.	Alterations to existing roadways, including improved turning lanes on SR 152 and SR 33 at project area entry points.	Alterations to existing roadways, including improved turning lanes on SR 152 and SR 33 at project area entry points.
	Close access from SR 152 and allow access to Basalt and administration area via Gonzaga Rd. only.	Close access from SR 152 and allow access to Basalt and administration area via Gonzaga Rd. only.	--
	--	Improved signage outside of project area and at entry points.	--
	--	Interchange at San Luis Creek entry road with limited access overpass from Gonzaga Road.	Interchange at San Luis Creek entry road with limited access overpass from Gonzaga Road.
	--	Crossing from Gonzaga Road to Medeiros with a blending lane to SR 152.	Crossing from Gonzaga Road to Medeiros with a blending lane to SR 152.
Project Area - Wide	Upgrade utilities only if failing.	Upgrade all utilities to current standards.	Upgrade all utilities to current standards.
	Install additional lighting only as needed.	Add lighting where appropriate to improve safety.	Add lighting where appropriate to improve safety.
	Provide real time water level information and maintenance of current water levels and water quality targets.	Provide real time water level information and maintenance of current water levels and water quality targets.	Provide real time water level information and maintenance of current water levels and water quality targets.
	--	Explore engineering solutions for shallow areas at low water levels, including dredging and removal of sandbars.	--
	Maintain existing trailside exhibits.	Maintain existing trailside exhibits.	Maintain existing trailside exhibits.
	Create additional passive interpretive programs, including themes such as	--	--

Table 3-23 Action Alternatives Summary by Use Area			
USE AREA	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
	mitigation lands, birding, SWP/CVP operations.		
	Section 106 compliance.	Section 106 compliance.	Section 106 compliance.
	--	Complete an inventory of known cultural and historic resources and artifacts. Conduct additional site surveys to identify further cultural and historic resources. Perform additional monitoring of cultural resources.	Complete an inventory of known cultural and historic resources and artifacts.
	--	Develop a cultural resources management plan, including Best Management Practices (BMP) for cultural resource protection.	--
	--	Develop a fire management plan.	Develop a fire management plan.
	--	Inventory and map vegetation and wetland areas.	Inventory and map vegetation and wetland areas.
	--	Develop and implement a program for the restoration of natural ecosystems using best management practices.	Develop and implement a program for the restoration of natural ecosystems using Best Management Practices.
	--	Conduct annual vegetation and wetland monitoring.	Conduct annual vegetation and wetland monitoring.
	--	Inventory wildlife species occurring in the project area.	Inventory wildlife species occurring in the project area.
	--	Coordinate protection of special status	Coordinate protection of special status

Table 3-23
Action Alternatives Summary by Use Area

USE AREA	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
		wildlife with other agencies.	wildlife with other agencies.
	Develop and maintain comprehensive wildlife corridors.	Develop and maintain comprehensive wildlife corridors.	Develop and maintain comprehensive wildlife corridors.
	--	--	Cooperate with the Merced County HCP.

NOTE: This table is not inclusive of all management actions. Chapter 3 outlines additional goals and guidelines detailing management actions.

-- No change from current activities

Alternative 1: No Action/No Project Alternative

NEPA regulations (40 CFR 1502.14(d)) and CEQA Guidelines (Section 15126.6) require that a No Action (NEPA) and No Project (CEQA) alternative be analyzed in an EIS and EIR, respectively, to allow decision-makers to compare the impacts of not approving the project with those of approving the project. If the Resource Management Plan/General Plan for the project area were not approved, the existing level of improvements, facilities, and activities would continue. None of the new facilities or programs identified in the Resource Management Plan/General Plan would be implemented. Additionally, environmental enhancements would not occur. Section 4.4 Environmental Consequences evaluates the impacts associated with this Alternative in relation to the action alternatives.

Alternative 2: Limited New Access/Facilities

Alternative 2 is similar to the Preferred Alternative (Alternative 3) but with less overall new visitor access and facility diversity. General locations of the new facilities and primary features of Alternative 2 can be found on Map 7 and are listed in Table 3-23. A general description of this alternative and its differences from the Preferred Alternative are summarized below and organized by the planning areas defined in Chapters 2 and 3.

Resource Management. Alternative 2 proposes the fewest physical additions and visitor use modifications in the project area. It would close certain access routes for traffic safety purposes and limit public access to certain areas (i.e., eliminate Basalt access from SR 152, public access to Basalt Quarry and would implement management programs for vegetation, wildlife, climate, and scenic view sheds similar to those of the Preferred Alternative. However, the cultural resources management program under this alternative would be less extensive than under the Preferred Alternative; this alternative would comply with National Historic Preservation Act (NHPA) Section 106 requirements but would not include a cultural resources management plan. Hunting access to Lower Cottonwood Wildlife Area, outside of the project area, would be provided as it is now through the San Luis Creek Use Area entrance road; however, hunters would not be required to go through the entry station.

Visitor Experience, Interpretation and Education. This alternative would expand visitor experience and education compared with existing facilities and programs, but to a lesser degree than Alternatives 3 and 4. The Basalt Use Area campground would be reconfigured and expanded to add sites and hookups for larger RVs, and the existing campfire center would be upgraded. The Dinosaur Point Use Area boat launch would be expanded, and the Los Banos Creek Use Area campground would be expanded to add more tent sites. The Medeiros Use Area primitive tent camping would remain as is but new camping would be added across the forebay from this location (at San Luis Creek Use Area). At San Luis Creek Use Area, in addition to existing facilities, a shelter would be built for group events and interpretive programs, a new boat dock and ADA fishing access would be added, a lifeguard stand would be added, and opportunities for concessions would be explored including a camp store. Existing interpretive exhibits would be maintained and additional interpretive exhibits and programs would be provided, including the possibility of conducting guided tours of the dam by DWR.

Alternative 2 leaves the existing Off Highway Vehicle (OHV) Use Area in its current location; however, it does not provide for expansion of use in this area. In all alternatives, the existing horse camp and "Path of the Padres" trail at Los Banos Creek Use Area would remain as they are. This alternative proposes less

Santa Clara County
Merced County

Upper Cottonwood Wildlife Area

Cottonwood Bay

RD4

Provide trail link from day use to camping areas

San Luis Creek Use Area

- Construct shelter for group events and interpretive programs
- Camp store
- Boat dock
- Lifeguard stand
- ADA fishing access
- Evaluate concession opportunities

Santa Nella

Henry Miller Road

Provide hunter access that avoids entry station at San Luis Creek

Lower Cottonwood Wildlife Area

San Luis Wildlife Area

Honker Bay

O'Neill Dam

O'Neill Forebay Wildlife Area

SU4

Tent camping

O'Neill Forebay

RD5

Volta Road

Dinosaur Point Use Area

Dinosaur Point Road

152

Romero Overlook Visitor Center

Coordinate w/DWR for new interpretive programs

Medeiros Use Area

- Maintain existing camping as is
- Enhance and reopen boat launch

Expand boat launch

B.F. Sisk San Luis Dam

Gonzaga Road

152

To Los Banos
(approx 6 miles)

RD6

San Luis Reservoir

RD5

Gonzaga Road DPR Facilities

Off-Highway Vehicle Use Area

Maintain OHV area as is

Pacheco State Park

Goosehead Point

California Dept. of Forestry Fire Station

Jasper-Sears Mitigation Parcel

Pioneer Road

Quien Sabe Point

RN6

Recommend safety improvements to SR 152 at all access points

Use Gonzaga Road only to access headquarters

Existing Quarry

- Add up to 30 tent sites
- Provide service access off I-5

Lone Oak Bay

Basalt Use Area

Los Banos Creek Use Area

Canyon Road

Lone Oak Trail

- Upgrade existing campfire center
- Reconfigure campground to allow for larger RVs and add full hook-ups

Portuguese Creek Area

Conduct guided tours of dam

Close Basalt Quarry for public access

Arroyo Padre Flat

Horse Camp

RD6

Los Banos Reservoir

RN8

"Path of the Padres" Trail

Water Management Zones

Class Boundary

Class Codes

S – Suburban
RD – Rural Developed
RN – Rural Natural

Land Management Zones

- Administration & Operations (AO)
- Frontcountry (FC)
- Backcountry (BC)

Other Ownership Status

- Joint Use Area
- Pacheco State Park
- DFG owned and managed
- DWR owned

Boundaries

- Project Area
- Proposed uses and facilities

Source: USGS DRG / EDAW, 2002

1 0.5 0 1 2 Miles

Scale 1 : 79,200
1" = 1.25 miles

N

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EDAW

Existing Recreation Resources and Uses

Facilities
- Ranger Station
- Visitor Center
- Wind Warning Light

Camping
- Tenting
- Recreational Vehicle
- Group Site
- Horse Camping

Recreation Uses and Activities
- Boat Launch
- Windsurfing
- Swimming
- Fishing
- Hunting
- Equestrian
- Bicycling
- Off-Highway Vehicle
- Wildlife Viewing
- Hiking
- Day Use

San Luis Reservoir State Recreation Area

MAP 7
Alternative 2

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San Luis Reservoir State Recreation Area

MAP 8
Alternative 3

Santa Clara County
Merced County

Upper Cottonwood Wildlife Area

Cottonwood Bay

RD4

Lower Cottonwood Wildlife Area

Tent camping

Provide trail link from day use to camping areas

San Luis Creek Use Area

- Personal watercraft launch
- Group picnic facilities
- Boat dock
- Lifeguard stand
- ADA fishing access
- Evaluate concession opportunities
- Child fishing area
- Marina
- Construct shelter for group events and interpretive programs
- Expand boat launch

Santa Nella

Henry Miller Road

Explore access from SR 152

San Luis Wildlife Area

Honker Bay

Dinosaur Point Use Area

Dinosaur Point

152

Develop trail link from Dinosaur Point to Pacheco SP and DFG lands

Pacheco State Park

- Add marina
- Expand boat launch
- Campground - up to 30 tent sites

Romero Overlook Visitor Center

Coordinate w/DWR for new interpretive programs

New Caltrans interchange

B.F. Sisk San Luis Dam

Gonzaga Road DPR Facilities

San Luis Reservoir

RD6

RD5

Goosehead Point

Quien Sabe Point

RN6

Rural Natural (RN)

Existing Quarry

Lone Oak Bay

Trail to continue on SP land

Develop multi-use trail linking Basalt with Pacheco State Park

Lone Oak Trail

Portuguese Creek Area

Develop backpackers camp

SU4

O'Neill Forebay

RD5

O'Neill Dam

O'Neill Forebay Wildlife Area

Explore solutions to low water levels including dredging and removal of sandbars

Volta Road

Medeiros Use Area

- Maintain existing camping as is and add up to 200 campsites
- Enhance and reopen boat launch

Restroom & changing cabanas

Gonzaga Road

152

To Los Banos (approx 6 miles)

Off-Highway Vehicle Use Area

Maintain OHV area as is

Pioneer Road

California Dept. of Forestry Fire Station

Jasper-Sears Mitigation Parcel

Recommend safety improvements to SR 152 at all access points

Use Gonzaga Road only to access headquarters

5

- Develop ranger station, staff housing and maintenance facilities
- Add up to 30 tent sites
- Improve entry station access road to avoid flooding
- Provide service access off I-5

Canyon Road

Basalt Use Area

- Reconfigure campground to allow at all access points for larger RVs and add full hook-ups
- Add group camp for up to 60 people
- Upgrade existing campfire facility
- Explore possibility of cycling and fishing on dam
- Add another RV loop for 30 sites

Allow guided tours of Basalt quarry

Los Banos Creek Use Area

Arroyo Padre Flat

Horse Camp

RD6

Los Banos Reservoir

RN8

"Path of the Padres" Trail

Water Management Zones

Class Boundary

Class Codes
- S – Suburban
- RD – Rural Developed
- RN – Rural Natural

Land Management Zones
- Administration & Operations (AO)
- Frontcountry (FC)
- Backcountry (BC)

Other Ownership Status
- Joint Use Area
- Pacheco State Park
- DFG owned and managed
- DWR owned

Boundaries
- Project Area
- Proposed uses and facilities

Source: USGS DRG / EDAW, 2002

1 0.5 0 1 2 Miles

Scale 1 : 79,200
1" = 1.25 miles

N

4/21/05

EDAW

Existing Recreation Resources and Uses

Facilities
- Ranger Station
- Visitor Center
- Wind Warning Light

Camping
- Tenting
- Recreational Vehicle
- Group Site
- Horse Camping

Recreation Uses and Activities
- Boat Launch
- Windsurfing
- Swimming
- Fishing
- Hunting
- Equestrian
- Bicycling
- Off-Highway Vehicle
- Wildlife Viewing
- Hiking
- Day Use

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San Luis Reservoir State Recreation Area

MAP 9
Alternative 4

Santa Clara County
Merced County

Upper Cottonwood Wildlife Area

Lower Cottonwood Wildlife Area

Cottonwood Bay

RD4

Explore access from SR 152

San Luis Wildlife Area

Honker Bay

Dinosaur Point Use Area

Dinosaur Point Road

152

- Expand boat launch
- Add marina
- Campground - up to 30 tent sites

Pacheco State Park

RD6

Provide trail link from day use to camping areas

San Luis Creek Use Area

- Add marina
- Construct shelter for group events and interpretive programs
- Boat dock
- Lifeguard stand
- ADA fishing access
- Evaluate concession opportunities
- Expand boat launch

33

Santa Nella

Henry Miller Road

O'Neill Dam

O'Neill Forebay Wildlife Area

Develop a wetland demonstration area and water-based play area, with water theme interpretive program

Volta Road

SU4

Tent camping

O'Neill Forebay

RD5

Romero Overlook Visitor Center

Coordinate w/DWR for new interpretive programs

New Caltrans interchange

B.F. Sisk San Luis Dam

Gonzaga Road

Medeiros Use Area

- Maintain existing camping as is and add up to 150 campsites
- Enhance and reopen boat launch

To Los Banos
(approx 6 miles)

San Luis Reservoir

RD5

Gonzaga Road DPR Facilities

Goosehead Point

Off-Highway Vehicle Use Area

Expand OHV use in current location

Pioneer Road

California Dept. of Forestry Fire Station

Jasper-Sears Mitigation Parcel

5

Explore development of an internal road for access to Los Banos

Quien Sabe Point

RN6

Existing Quarry

Recommend improvements to SR 152 at all access points

Canyon Road

- Add up to 60 tent sites

Lone Oak Bay

Basalt Use Area

Los Banos Creek Use Area

Lone Oak Trail

- Close access to dam for all users
- Reconfigure campground to allow for larger RVs and add full hook-ups
- Add group camp for up to 60 people

Portuguese Creek Area

Arroyo Padre Flat

Horse Camp

RD6

Los Banos Reservoir

RN8

Construct a new Visitors Center

Explore development of hiking trail from Los Banos to Basalt

"Path of the Padres" Trail

Water Management Zones

Class Boundary

Class Codes

S – Suburban
RD – Rural Developed
RN – Rural Natural

Land Management Zones

- Administration & Operations (AO)
- Frontcountry (FC)
- Backcountry (BC)

Other Ownership Status

- Joint Use Area
- Pacheco State Park
- DFG owned and managed
- DWR owned

Boundaries

- Project Area
- Proposed uses and facilities

Source: USGS DRG / EDAW, 2002

1 0.5 0 1 2 Miles

Scale 1 : 79,200
1" = 1.25 miles

N

4/21/05

EDAW

Existing Recreation Resources and Uses

Facilities
- Ranger Station
- Visitor Center
- Wind Warning Light

Camping
- Tenting
- Recreational Vehicle
- Group Site
- Horse Camping

Recreation Uses and Activities
- Boat Launch
- Windsurfing
- Swimming
- Fishing
- Hunting
- Equestrian
- Bicycling
- Off-Highway Vehicle
- Wildlife Viewing
- Hiking
- Day Use

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expansion of camping at Medeiros Use Area, less intensive visitor development at San Luis Creek Use Area, and fewer vehicular and trail access expansions/improvements than Alternatives 3 and 4.

Local and Regional Planning. All three action alternatives provide for coordination amongst the four managing agencies of the project area as well as with other agencies and stakeholders. Alternative 2 would provide for addressing conflicts between hunting and other uses on surrounding lands at Dinosaur Point Use Area, which would also occur under Alternatives 3 and 4.

Infrastructure and Operations. All of the action alternatives would improve access from SR 152 and SR 33 with safety improvements. As with the Preferred Alternative, Alternative 2 would close the Basalt Use Area and administration area access from SR 152, and allow access from Gonzaga Road only. A new service access off of I-5 at Canyon Road would be provided but would be limited to staff use. Unlike Alternatives 3 and 4, operations and management facilities would not be improved or expanded, and additional lighting would be installed only as needed. No new operational and management facilities would be constructed at Los Banos Creek Use Area. Utilities would be inventoried but would only be upgraded if they were failing.

Water Operations. Water operations improvements, including provision of real-time water level information to recreation users, and maintenance of current water levels and quality targets, are proposed in all three action alternatives.

Alternative 3: Preferred Alternative – Long Range Development/Habitat Protection

The primary components of this alternative are similar to those in Alternative 2, except Alternative 3 proposes additional development to accommodate visitor use and programs, and more aggressive resource management efforts. The location of new facilities and the primary features of Alternative 3 are shown on Map 8, and listed in Table 3-23. A general description of this alternative and its differences from action alternatives 1, 2 and 4 are summarized below and organized by the planning areas defined in Chapters 2 and 3.

Resource Management. The Preferred Alternative proposes substantial physical additions and visitor use modifications, primarily on SRA lands within the project area; however, these additions would be located and developed to avoid substantive conflicts with the project area's sensitive resources. It would implement specific management programs for vegetation, wildlife, climate, cultural resources, and scenic view sheds. The cultural resources management efforts under this alternative would be greater than the other alternatives.

Visitor Experience, Interpretation and Education. This alternative proposes substantial expansions in visitor facilities, including adding 30 RV sites, 10 primitive tent sites, a new group camp, and an upgraded campfire center at Basalt Use Area as well as reconfiguration of the existing campground to allow for larger RVs and adding full hook-ups. This alternative also proposes investigating access to the Honker Bay area from SR152, near Dinosaur Point Use Area, to accommodate future water access and day use activities. Currently, no camping is provided at Dinosaur Point Use Area, so access to Honker Bay could provide tent camping for up to 30 sites, depending on water levels and the ability to gain viable access from SR 152. Alternative 3 also provides for construction of a new marina at Dinosaur Point Use Area, should demand not be met at San Luis Creek Use Area. At Los Banos Creek Use Area, expansion of the campground by adding up to 30 tent sites is proposed. At the Medeiros Use Area, expanding

boating, windsurfing facilities with parking, and camping facilities (including adding up to 100 new tent sites and 100 informal primitive campsites) is proposed. At San Luis Creek Use Area, additional camping (up to 30 tent sites), boating, fishing, concessions (possibly including jet ski, kayak, boat rentals, and food service), hiking, interpretive programs and group events shelter, and group picnic facilities are proposed. This alternative leaves the existing OHV area in its current location; however, it does not provide for expansion of use in this area (as in Alternative 2). Overall, some facility expansions are greater in this alternative, although they would be predominantly confined to existing use areas and thus prevent encroachment into undeveloped areas.

Local and Regional Planning. This alternative would facilitate local and regional planning objectives by developing a multi-use trail linking Basalt Use Area with Pacheco State Park, including a backpackers camp, and another trail linking Dinosaur Point to adjacent Pacheco State Park and San Luis Wildlife Area, thereby enhancing the use and benefits of contiguous open space. It would also address hunting-related conflicts (as in Alternatives 2 and 4). Alternative 3 would not include possible trails linking Los Banos Creek to San Luis Reservoir or explore opportunities for an internal access road to avoid use of I-5 (as in Alternative 4). As with all alternatives, coordination with local and regional planning efforts is defined in more detail in the Plan.

Infrastructure and Operations. All of the action alternatives would improve access from SR 152 and SR 33. Alternatives 3 and 4 propose that, in coordination with Caltrans, an interchange at San Luis Creek Use Area be constructed for access from SR 152 with a limited access overpass to and from that area from the SRA Administrative Offices and Gonzaga Road. Additionally, a crossing from Gonzaga Road to Medeiros Use Area with a blending lane onto SR 152 is proposed. As with Alternative 2, this alternative would close the Basalt Use Area and administration area access from SR 152, and allow access from Gonzaga Road only. Signage outside of the project area and entry points would be improved. Access from SR 152 to the Honker Bay area would be explored for additional visitor facilities as noted above. At Los Banos Creek Use Area, the entry station would be improved, and a new ranger station, staff housing, and maintenance facilities would be constructed. Lighting adequacy would be evaluated throughout the project area, and additional lighting would be installed. All utilities would be upgraded to current standards.

Water Operations. Water operations improvements include provision of real-time water level information to recreation users and maintenance of current water levels and quality targets as proposed in Alternative 2, as well as exploration of engineering solutions to solve safety and access problems in shallow water areas at low pool levels (e.g., dredging and removal of sandbars), particularly at O'Neill Forebay.

Alternative 4: Maximum New Access/Moderate Development

The primary components of this alternative are similar to those in Alternative 3; however, Alternative 4 proposes some alternate ways of handling access with the creation of an internal access road between Gonzaga Road and Los Banos Reservoir and future development of certain use areas, with similar resource management efforts. Locations of new facilities and primary features of Alternative 4 are shown on Map 9 and listed in Table 3-23. A general description of this alternative and its differences from Alternatives 1, 2 and 3 are summarized below and organized by the planning areas defined in Chapters 2 and 3.

Resource Management. Alternative 4 proposes substantial physical additions and visitor use modifications in the project area, with less recreational facilities in most areas but greater access improvements compared with the Preferred Alternative. As with the Preferred Alternative, these additions would be located and developed to avoid substantive conflicts with the project area's sensitive resources. However, it would include more access and development in areas that are currently undeveloped. It would implement specific management programs for vegetation, wildlife, climate, and scenic view sheds. The cultural resources management efforts under this alternative would be greater than Alternative 2 (cultural resources inventory and Section 106 compliance) but, unlike the Preferred Alternative, no cultural resources management plan would be developed. Unlike the other alternatives, Alternative 4 would include participation in the Merced County Habitat Conservation Plan. Hunting to support resource management purposes in certain areas of the SRA, as permitted under Department regulations, would also be considered under this alternative.

Visitor Experience, Interpretation and Education. This alternative proposes some expansion in visitor facilities. Facilities development at Basalt, Dinosaur Point, and Los Banos Creek use areas would be the same as described above for Alternative 3 (addition of 30 RV sites, a new group camp, constructing a new marina at Dinosaur Point, and exploring opportunities for expansion of the Los Banos Creek Use Area campground). This alternative would allow up to 50 new tent sites at Los Banos Creek Use Area, 20 more than Alternative 3. Facility expansion at San Luis Creek and Medeiros use areas would be the same as described above for Alternative 2 and would be less intense than the Preferred Alternative (50 fewer campsites at Medeiros Use Area and deletion of personal watercraft launch area and group picnic areas at San Luis Creek). Alternative 4 would include some features proposed in Alternative 3 at San Luis Creek Use Area including a marina, boat dock, lifeguard stand, and ADA fishing access. Interpretive facilities under this alternative would include a new visitor's center and a wetlands demonstration area to interpret the function and need for wetland areas. This would also include a child's play area that is water-based to interpret the need and value of water quality and quantity. A new shelter for group events and interpretive programs is also proposed as with the other action alternatives. This alternative would expand the use of the existing OHV Use Area. Overall, these facilities expansions would be greater than Alternative 2 and the Preferred Alternative except for differences with some of the interpretive facilities as well as additional tent sites at Los Banos Use Area.

Local and Regional Planning. This alternative would facilitate local and regional planning objectives as proposed in the Plan for all alternatives. Additionally, some new vehicular and trail connections as noted above would facilitate shorter emergency response times and reduce traffic volumes on SR152.

Infrastructure and Operations. All of the action alternatives would improve access from SR 152 and SR 33. Unlike Alternatives 2 and 3, this alternative would not close the Basalt access from SR 152; however, it would propose the same connections and improvements to points north of SR 152 as Alternative 3. Signage outside of the project area and entry points would be improved. Additionally, this alternative would include development of an internal access road connecting Los Banos Creek Use Area with Gonzaga Road via the existing road adjacent to OHV Use Area and a trail connection between this area and Basalt Use Area. This would be in lieu of using a new service access from I-5 as proposed in Alternatives 2 and 3. Compared to the Preferred Alternative, access from SR 152 to Honker Bay would not be explored, nor would the Los Banos Creek Use Area entry station be improved. Existing operational and maintenance facilities would not be changed; no new ranger station, staff housing, and maintenance facilities would be constructed at Los Banos Creek Use Area. As with the Preferred

Alternative, lighting adequacy would be evaluated, additional lighting would be installed, and all utilities would be upgraded to current standards.

Water Operations. Water operations improvements proposed in Alternative 4 would be the same as proposed in Alternative 2. These include provision of real-time water level information to recreation users and maintenance of current water levels and quality targets.

3.5 CARRYING CAPACITY

This section describes guidance for establishing and measuring carrying capacity. Recreation carrying capacity has been defined in many ways, but a useful definition is "the level of use beyond which impacts exceed standards" (Shelby and Heberlein 1986). A summary of visitor use and facilities is presented to illustrate how the preferred alternative or desired future condition compares to some existing uses and numbers of visitors. Carrying capacity can be analyzed and measured using four types of indicators: ecological capacity, spatial capacity, facility capacity and social capacity. Exploring different levels of capacity are important in determining where capacity concerns may exist and where management priorities and monitoring programs should be directed (EDAW, Inc. 2004). Indicators and standards of quality are integral components of determining recreation carrying capacity of an area. Finally, some examples of ecological quality indicators are presented to be considered for monitoring the success of the desired future conditions presented in Chapter 3.

Characterization of Carrying Capacity

Carrying capacity as it relates to recreation has been discussed and defined in a variety of forums at both the state and federal levels. Federal land management and recreation agencies have developed several models for analysis of resource conditions, monitoring, and assessment of the visitor use impacts. In the United States, Limits of Acceptable Change (LAC) was first implemented to address visitor management issues in designated wilderness managed by the U.S. Forest Service (USFS) in the Bob Marshall Wilderness of Montana. The National Park Service (NPS) uses a derivative system known as the Visitor Experience and Resource Protection (VERP) planning process. *Visitor Capacity on Public Lands and Waters,* a report by the Federal Interagency Task Force on Visitor Capacity on Public Lands, provides another approach to visitor capacity on lands used for recreation. These examples are summarized below for reference.

LAC is a planning tool that assists managers in determining how much recreational impact a particular area can tolerate or how much change can occur before it becomes detrimental. The process requires deciding what kinds of conditions are acceptable through the designation of opportunity classes or management zones, then prescribing actions to protect or achieve those conditions. Measurable indicators and standards of the class or zone condition are set up and managers use these to assess conditions and monitor them over time. Management actions are prescribed and adjusted to ensure that change does not exceed acceptable levels.

The VERP framework is one of the adaptations of the LAC process. It is expanded to address a wide variety of resource settings for frontcountry as well as backcountry experiences. It was conceived and designed to be part of the NPS General Management Plan process. The VERP framework is defined as follows:

> *A planning and management framework that focuses on visitor use impacts on the visitor experience and the park resources. These impacts are primarily attributable to visitor behavior, use levels, types of use, timing of use, and location of use.*

The framework is intended to provide a logic and rationale for carrying capacity decision making. Documenting the rationale for decisions is especially important when those decisions are controversial, such as limiting visitor use or increasing development.

Visitor Capacity on Public Lands and Waters (Haas 2002) defines visitor capacity as "supply or prescribed number of appropriate visitor opportunities that will be accommodated in an area." The report further defines capacity as "the number or numeric range related to the relevant social unit(s) detailed in the management objectives (or desired future conditions) for an area." An example of capacity expression is 35 designated backcountry campsites. This report suggests a methodology that uses three different levels of analysis depending on the purpose or use of the visitor capacity information and provides a rating system that can be used to gather information and set numeric ranges.

The Public Resources Code (PRC) §5019.5 requires the California Department of Parks and Recreation (Department) to assess carrying capacity for proposed San Luis Reservoir State Recreation Area (SRA) plans, "Before any park or recreational area developmental plan is made, the department shall cause to be made a land carrying capacity survey of the proposed park or recreational area, including in such survey such factors as soil, moisture, and natural cover."

PRC §5001.96 further states that, "Attendance at state park system units shall be held within limits established by carrying capacity determined in accordance with Section 5019.5."

The Department's Planning Handbook provides the following definition:

> *Recreation carrying capacity can be defined as a prescribed number and type of visitors that an area will accommodate given the desired natural/cultural resource conditions, visitor experiences, and management program.*

The Planning Handbook notes that the plan should include established goals and guidelines for visitor use management that will lead to the desired future conditions. It also states that:

> *Carrying capacity (use limits) may be established for a unit (or individual areas) at the time when more detailed information is made available; more appropriately during the preparation of management plans.*

Adaptive Management

Adaptive management is an explicit and analytical process for adjusting management and research decisions to better achieve management objectives; wherever feasible, this process should be quantitative. Adaptive management recognizes that knowledge about natural resource systems is uncertain. Therefore, some management actions are best conducted as experiments in a continuing attempt to reduce the risk arising from that uncertainty. The aim of such experimentation is to find a way to achieve the objectives as quickly as possible while avoiding inadvertent mistakes that could lead to unsatisfactory

results. The concept of adaptive management represents the common sense of "learning by doing" (Goodman, Sojda).

Adaptive management is a tool to assist in addressing recreation carrying capacity and is included in this Plan. Adaptive management is an ongoing, iterative process of determining desired conditions, selecting and monitoring indicators and standards that reflect these desired conditions, and taking management action when the desired conditions are not being realized. If the managing agency determines that a specific location within the project area is not meeting the desired future conditions set forth herein, then management action would begin. Management action could determine that the violation was caused by natural variation (e.g., by a natural storm event) or by human-induced variables (e.g., trampling associated with hiking). Management actions should comply with the requirements of NEPA/CEQA and other applicable regulations and could include, but are not limited to, the following:

- site management (e.g., facility design, barriers, site hardening, area/facility closure, redirection of visitors to suitable sites);
- regulation (e.g., the number of people, the location or time of visits, permitted activities, or allowable equipment);
- enforcement of regulations (e.g., patrols, notification, citations);
- education (e.g., information signs and exhibits, interpretive programs, visitor center exhibits, brochures and fliers, public meetings, meetings with user groups); and
- altering access (e.g., parking in proximity to sensitive resources, limiting certain types of access such as vehicular access in certain areas).

Visitor Use and Facility Summary

Desired future conditions at the project area are outlined previously in this Chapter in the goals and guidelines, management zones and preferred alternative. Through the Plan's proposed policies, facilities, uses and associated visitors, along with the resource management actions, the future carrying capacity is being prescribed, by setting the maximum number of facilities that may ultimately be developed. Currently, not all existing visitors and facilities or the ecological capacity can be quantified. Part of the Plan implementation will be to gather more information with regards to visitor demographics and facility use at the project area as well as additional information regarding natural and cultural resources. This will serve to create a more through baseline from which to verify if the proposed uses and facilities in this Plan are meeting certain indicators and standards (see below). Based on all information available for the project area, it is clear that there are additional land areas that could be developed and existing developed areas could be expanded to an even greater degree than what is being proposed in this Plan. However, given the need to create a Plan for the next 25 years, with current available information, it is necessary to set certain ranges of future development. The maximum amount of development, as prescribed in the Plan, may not ultimately be needed, but a balance between what may be needed and what is possible is sought. The quantifiable aspects of visitor use and facilities under the existing conditions and the preferred alternative are summarized in Table 3-24 to provide a comparison of how the existing use areas may change and be used during the life of the Plan. Due to the current collection of data about visitors and their use, it is not possible to project how many total visitors may visit the project area each year.

Table 3-24
Visitor Use and Facility Summary

	2002-2003 VISITORS[3]	EXISTING PARKING CAPACITY[4]	EXISITNG FACILITIES	FUTURE FACILITIES
SRA Use Area				
San Luis Creek		390 (vehicles)		
• Paid day use	224,527	unknown	148 shade ramadas[5]	See Table 3-6[6] group picnic facilities[7]
• Free day use	25,153	unknown		
• Overnight use	17,254	unknown	53 tent/RV[8] 2 group sites (90 people)	30 tent sites
• Boats launched	5,602	171 (with trailer)	3-lane launch	expanded
Total	**70,536**	**561**	**55 campsites/148 ramadas (1,191 people)**	**30 tent sites/5 large shade armadas (315 people)**
Medeiros		300 (Informal)		
• Paid day use	75,633	unknown	42 shade ramadas	See Table 3-7
• Free day use	8,007	unknown		
• Overnight use	13,844	unknown	42 tent/RV 300 primitive[9]	100 tent/RV 100 primitive
• Boats launched	0	0	0	Improve boat launch
Total	**29,384**	**300**	**342 campsites/42 w/ shade armadas (1020 people)**	**200 campsites/100 w/ ramadas (250 people)**
Basalt		278 (vehicle)		
• Paid day use	190,240	unknown	Fishing, trails	See Table 3-4
• Free day use	21,916	unknown		
• Overnight use	15,638	unknown	79 tent/RV	30 RV/ 1 large group site for 60 people and 10 tent sites
• Boats launched	12,602	156 (trailers)	4-lane launch	0
Total	**240,396**	**434**	**79 campsites (315 people)**	**41 campsites 240 people)**

[3] Visitor use data taken from Tables 2-21 through 2-26. Please refer to these for source information.
[4] Data taken from Table 2-15. Please refer to this table for source information. Parking does not include spaces provided as part of campgrounds.
[5] Assumed 6 persons per shade ramada.
[6] All proposed day use facilities are not listed here for each area, only those that can be quantified. Please refer to tables noted for more detail on all proposed facilities.
[7] Group picnic facilities to be 2 @ 25 people/site, 2 @50 people/site and 1 @75 people/site.
[8] Assumed 3 persons per tent site and 5 persons per RV site. To calculate total visitors, mixed sites were assumed to be used for tent sites and one half for RV's.
[9] Assumed 2 persons per primitive site.

Table 3-24
Visitor Use and Facility Summary

	2002-2003 VISITORS[3]	EXISTING PARKING CAPACITY[4]	EXISITNG FACILITIES	FUTURE FACILITIES
Dinosaur Point		123 (vehicle)		
• Paid day use	77,256	unknown	5 shade ramadas	See Table 3-5
• Free day use	8,780	Unknown		
• Overnight use	0	unknown	0	30 tent
• Boats launched	6,663	trailer parking on boat ramp	4-lane launch	expanded
Total	92,699	123	5 shade armadas (30 people)	30 campsites w/shade armadas (90 people)
Los Banos Creek		40		
• Paid day use	42,386	unknown		See Table 3-8
• Free day use	5,225	unknown		
• Overnight use	5,275	unknown	14 tent/RV w/shade ramadas	30 tent w/shade ramadas
• Boats launched	4,790	all spaces for trailers	N/A	N/A
Total	57,676	40	14 campsites w/shade armadas (56 people)	30 tent sites w/shade armadas (90 people)
GRAND TOTAL	490,691	1,458	- 490 campsites (176 tent/RV, 300 primitive, 14 tent, 56 w/shade ramadas) - 48 day use shade ramadas (2,612 people)	- 321 campsites (100 tent/RV, 100 primitive, 30 RV and 110 tent, 1 large group site, 60 w/shade ramadas) - 5 large day use shade ramadas (985 people)

Project Area Quality Indicators

Indicators and standards of quality are integral components of determining recreation carrying capacity of an area. Indicators are defined as, "measurable, manageable variables that help define the quality of the visitor experience; standards of quality are defined as, "the minimum acceptable condition of indicator variables (Manning et al. 2001). Quality indicators will assist land managers in determining whether desired future conditions are being met. Desired future conditions at the project area are outlined previously in this Chapter through the goals and guidelines, management zones and preferred alternative. For each of the planning areas, an overall goal is presented in Table 3-21, and quality indicators and corresponding management actions are shown to provide examples of indicators and adaptive management actions that could be used. These will be enhanced as the Plan is implemented.

Table 3-25
Project Area Quality Indicators

PLANNING AREA	GOAL	QUALITY INDICATORS	POSSIBLE MANAGEMENT ACTIONS
Resource Management	Protect and preserve, restore, and rehabilitate the physical, cultural, scenic, vegetative, and wildlife resources.		
Scenic/Aesthetic		- Scenic vistas are reduced or interrupted with features not compatible with landscape character. - New facilities dominate the landscape.	- Remove incompatible structure or elements.
Cultural/Historic		- Cultural resources are threatened or lost during construction.	- Ensure that a qualified archaeologist is present during construction or redesign project to avoid potential damage to resources.
Geology/Soils		- Erosion is occurring along trails or adjacent areas as evidenced by exposed tree roots and ruts.	- If erosion is caused by visitor use, limit intensity, duration, or type of use accordingly. - Consider trail closure and removal., or relocation.
Hydrology		- Sedimentation is evident in ponds and springs.	- Ensure adequate plant cover over erodible soils or provide temporary stabilization during construction.
Vegetation		- There are reduced occurrences of special-status species. - Invasive species are spreading or new occurrences are becoming evident.	- Restore habitat or reintroduce lost species. - Increase or alter removal program for invasive species. - Revegetate disturbed areas with native species.
Wildlife		- Wildlife is disturbed.	Close areas seasonally i..e. campgrounds during nesting seasons.
Visitor Use and Experience	Preserve and enhance optimum and diverse experiences for a wide range of visitors.		
Visitor Facilities		- Visitors complain about lack of necessary facilities or overcrowding.	Improve facilities to accommodate visitor use. Limit access during peak times.
Trails		- Conflicts such as accidents occur between users on multiuse paths.	- Consider limiting use of certain trails during peak times.

Table 3-25
Project Area Quality Indicators

PLANNING AREA	GOAL	QUALITY INDICATORS	POSSIBLE MANAGEMENT ACTIONS
Interpretive Themes		- Visitors complain about lack of project area information. - Visitors display disrespect toward project area resources.	- Interpretive materials and programs may need to be increased.
Concession Opportunities		- Certain key interpretive programs cannot be fully implemented without concessionaire participation.	- Supplement interpretive activities with seasonal or temporary assistance from concessionaires.
Infrastructure and Operations	Ensure efficient, safe, and adequate infrastructure and operations.		
Project Area Access and Circulation		- Accidents occur at SR 152 accessing the project area.	- Work more vigorously with Caltrans to get improvements funded and implemented.
Staffing Needs and Facilities		- Safety or overcrowded conditions are prevalent. - Summer interns cannot be accommodated.	- Explore feasibility of upgrading existing structures. - Add temporary housing onsite.
Utilities		- Overcrowding of sanitary facilities reduces visitor experience	- Add or improve facilities to handle peak use.

SAN LUIS RESERVOIR SRA

4. Environmental Analysis

4. Environmental Analysis

4.1 INTRODUCTION

Use of an Integrated NEPA/CEQA Document

Use of an integrated Environmental Impact Statement/Environmental Impact Report (EIS/EIR) is encouraged by both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). CEQA and its guidelines have numerous provisions allowing state and local agencies to use an EIS as a substitute for an EIR. This Plan for the project area, including the environmental analyses are consistent with NEPA and CEQA requirements. This Plan in its entirety constitutes an EIS/EIR, as required by NEPA (40 CFR Parts 1500-1508), CEQA (California Public Resources Code section 21000 et seq.), and the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.).

Purpose of this EIS/EIR

The purpose of this EIS/EIR is to inform decision-makers and the public about any potentially significant effects that may result from the implementation of the Plan and provide mitigation measures to reduce those potentially significant effects. In addition, the document provides information on any impacts that cannot be avoided; growth-inducing impacts; effects found not to be significant; and cumulative impacts of past, present, and reasonably foreseeable future projects.

As required under NEPA, the EIS/EIR identifies the proposed action, evaluates potential impacts of each alternative at equal levels of detail, and identifies an environmentally preferable alternative. As required under CEQA, mitigation measures are formatted for inclusion in a Mitigation Monitoring and Reporting Program (MMRP) as appropriate, and an environmentally superior alternative is identified. This is a Program EIS/EIR for the Plan and does not contain project-specific analysis of projects recommended in the Plan. Because the Plan is a long-range plan, additional management planning, schematic design, and construction documentation would be completed as necessary before improvements are made. At this time, there is not sufficient information available to support a project-specific analysis, but future projects will undergo subsequent NEPA/CEQA review as appropriate.

This programmatic EIS/EIR is intended for use in a "tiered" process of environmental review, and the discussion of project impacts is commensurate with the level of specificity of this Plan. Tiering in an EIS/EIR on a program level plan allows agencies to deal with broad environmental issues at the planning stage, followed by more detailed examination of actual development projects (that are consistent with the Plan) in subsequent NEPA and CEQA assessments. These assessments may later incorporate by reference the general discussion from the program-level EIS/EIR, in this case the Plan, and concentrate solely on the issues specific to the later projects (Public Resources Code Section 21093: State CEQA Guidelines; CCR Section 15152; [40 CFR 1508.28]). Accordingly, the Plan and EIS/EIR constitute the first (broadest and most general) tier of environmental review.

The Plan and EIS/EIR are combined herein as one document. Chapter 2, Existing Conditions, serves as the environmental setting for the environmental analysis. Chapter 3, Project Plan, contains policy goals and guidelines, management zone descriptions and designations, description of the project alternatives

and serves as the project description. Combining preparation of the Plan with the environmental analysis provides the opportunity to mitigate impacts of the Plan through the goals and guidelines. For impacts that are identified in this section, the goals and guidelines from Chapter 3 serve as mitigation as well as those mitigation measures that are noted in this chapter. Chapter 4 serves as the Environmental Consequences and other required NEPA/CEQA sections.

Implementation of project-specific development plans will generally be carried out as the first phase of major and minor capital outlay projects. At each subsequent planning level area development plan, or a major or minor capital outlay project, the specific development plan or project will be subject to further, more detailed environmental review to determine if it is consistent with this General Plan and whether this programmatic EIS/EIR adequately addresses impacts of the proposed project. More detailed environmental review to identify any significant environmental impacts and mitigation measures that would be specific to the project could be required at those levels of planning, where facility size, location, and capacity can be explicitly delineated, rather than at the general plan and resource management plan level.

Focus of the EIS/EIR

The U.S. Bureau of Reclamation (Reclamation) and the California Department of Parks and Recreation (Department) established the focus of this Draft EIS/EIR after considering comments from public agencies and the community regarding the Plan. Reclamation completed a Notice of Intent (NOI) on January 7, 2003 (Appendix E) and it was published in the Federal Register on February 7, 2003. The Department completed a Notice of Preparation (NOP) on November 22, 2002 (Appendix E). In addition, a public scoping session on the project was held on January 11, 2003 and February 20, 2003, to inform the public of the Plan, solicit comments, and identify areas of concern. An overview of all aspects of the Public Involvement Program can be found in Chapter 7.

The following issues are addressed in this EIS/EIR:

- Hydrology and Water Quality
- Air Quality
- Noise
- Biological Resources
- Cultural Resources
- Transportation and Traffic
- Utilities and Public Services
- Scenic/Aesthetic Resources

Environmental Review Process

Consistent with NEPA/CEQA requirements, a good-faith effort has been made during the preparation of this EIS/EIR to contact and consult with affected agencies, organizations, and persons who may have an interest in this project. This included the circulation of an NOI/NOP, which began a 30-day comment period. The purpose of the NOP was to inform agencies and the general public that an EIS/EIR was

being prepared for the project area, and to invite specific comments on the scope and content of the EIS/EIR. Letters and comments were received and are summarized in Chapter 7 and Appendix E.

Upon issuance of this draft for public review, Reclamation will file a Notice of Availability (NOA) for placement in the Federal Register and the Department will file a NOA with the Governor's Office of Planning and Research, State Clearinghouse, indicating that this Draft Plan and EIS/EIR has been completed and is available for review and comment by the public. A CEQA NOA of the Draft EIR will be published concurrently with distribution of this document followed by a 45-day public review period. Additionally, a 60-day review period (from the date the NOA is published in the Federal Register) will be provided for the public and other agencies to review and comment on the Draft EIS/EIR.

Reviewers of this Draft EIS/EIR should focus on the sufficiency of the document in identifying and analyzing the potential environmental impacts of the Plan. Comments may be made on the Draft EIS/EIR in writing before the end of the comment period. Following the close of the public review period, Reclamation and the Department will prepare responses to comments on the content and conclusions of the Draft EIS/EIR and will revise the document as necessary to address those comments. The Draft EIS/EIR and technical appendices, together with the responses to comments document (Volume II), will constitute the Final EIS/EIR.

Written comments on the Draft Plan and EIS/EIR should be sent to:

Mr. Robert Epperson
Resource Manager
Department of the Interior
Bureau of Reclamation
South-Central California Area Office
1243 "N" Street
Fresno, CA 93721-1813

or

Mr. Wayne Woodroof
Senior Park and Recreation Specialist
California Department of Parks and Recreation
Northern Service Center
One Capitol Mall, Suite 500
Sacramento, CA 95814
(916) 445-8850

Reclamation and the Department will review the Final EIS/EIR for adequacy and consider it for certification pursuant to the requirements of federal and state NEPA/CEQA Guidelines. If the Reclamation and the Department certify the Final EIS/EIR and decide to approve the Plan, a Finding of No Significant Impact (FONSI) and Notice of Determination will be prepared and filed with the Federal Register and State Clearinghouse. These will include a description of the project, the date of approval, and the address where the Final EIS/EIR and record of project approval are available for review.

If the EIS/EIR is certified and the project is approved, subsequent environmental review would be limited to the requirements outlined in the adopted mitigation measures for the project. There also would be subsequent Reclamation and Department review of phasing, siting, and grading plans to ensure that they are consistent with the Plan. If Reclamation or the Department finds, pursuant to 1500.4, 1500.5 and 1502.20 of the NEPA Guidelines and §15162 of the State CEQA Guidelines, that no new effects could occur or no new mitigation measures would be required, they can approve the activity as being within the scope of the project covered by this EIS/EIR. In such a case, no new environmental documentation would be required. However, if a proposed phase of the project would have effects that were not examined in this EIS/EIR, preparation of an additional environmental document would be required (NEPA Regulations Section 1502.20 and State CEQA Guidelines §15168(c)(1)).

4.2 ENVIRONMENTAL ANALYSIS SUMMARY

Summary of Impacts and Mitigation

Chapter 3, Project Plan identifies goals and guidelines for resource management, visitor experience, interpretation and education, local and regional planning, and infrastructure and operations. The goals and guidelines of this Plan are designed to avoid potentially significant effects on the environment.

An evaluation of the potential for significant environmental effects to hydrology and water quality, air quality, noise, biological resources, cultural resources, transportation and traffic, utilities and public services, and aesthetics is provided in Section 4.3. The specific guidelines noted in the mitigation section for each environmental topic would maintain potential environmental impacts at a less-than-significant level when implemented.

The protection and restoration of natural and cultural resources are key components of the Plan. Much of the project area will remain undeveloped, thereby keeping wildlife habitat intact, protecting scenic resources, preserving native vegetation, safeguarding watershed water quality, and continuing historic and cultural landscape protection and interpretation. Additionally, the Plan allows for staff and public safety, appropriate infrastructure and operations, and coordination with regional planning efforts and initiatives. The Plan also identifies conceptual locations for proposed project area facilities that would be located in the least environmentally constrained areas and clustered near existing development, as shown on Alternative Maps 7 through 9. Wildlife areas set aside for habitat mitigation when the project area facilities were built, will remain as managed by DFG, consistent with the original intent.

The environmental analysis prepared for the Plan is programmatic in scope and does not contain project-specific analysis for the facilities recommended in the Plan. However, the Plan also includes guidelines that will govern project-level environmental review of future projects to avoid or minimize any potential adverse site-specific effects to resources during construction or operations of the facilities. Site-specific projects would undergo subsequent NEPA and/or CEQA review in the future as appropriate.

Summary of Alternatives Considered

In addition to the NEPA and CEQA mandated No Action/No Project Alternative, three concept alternatives were considered during development of the Plan. Each alternative includes resource management actions to protect the physical resources of the site balanced with different scenarios for visitor facilities and experiences, while maintaining the project area purpose and vision. In all alternatives,

provisions have been made for infrastructure and operations and coordination with local and regional planning agencies and other entities. The goals and guidelines provided in Chapter 3 apply to all alternatives; however, the Preferred Alternative provides the most balanced scheme to implement these goals and guidelines. A description of the project alternatives is provided in Chapter 3, Section 3.4 and an environmental evaluation of the three action alternatives is provided in Section 4.5. The following summarizes the project alternatives:

Alternative 1: No action/no project alternative evaluates the positive and negative environmental aspects that would occur if the Plan was not adopted.

Alternative 2: Limited new access/facilities plan. A passive recreation plan and minimum future resource management. This alternative represents the minimum actions needed to address existing resource management issues within the project area and proposes a lower intensity of facility development than the Preferred Alternative.

Alternative 3: Long-range development/habitat protection plan. A balanced plan for future visitor facilities and resource management. This alternative anticipates increased future visitation with a provision for additional facilities but concentrates these in and around existing developed areas and ensures optimal resource management and protection. This is the Preferred Alternative.

Alternative 4: Maximum new access/moderate development plan. This alternative generally includes a the same or less than Alternative 3, however, some of the access and use is more intensive and may consume or affect more undeveloped potions of the project area. Resource management activities similar to Alternative 3.

Alternative 3 is considered the Preferred Alternative as it incorporates the features and elements that will best implement the goals and guidelines of the Plan. It was selected after considering public and responsible agency feedback on the three concept alternatives and to address the environmental concerns of the public and meet resource agency rules and regulations.

Project Description

Chapter 3, Project Plan, constitutes the project description with the project area purpose and vision, project area-wide goals and guidelines, a delineation of management zones and a description of the Alternatives.

Environmental Effects Found Not to be Significant

As required by NEPA/CEQA, this section presents discussions related to environmental effects found not to be significant. As a first tier of planning and environmental analysis, some topical issues were found not to be significant and were not evaluated further in this EIS/EIR. These topical issues are identified and briefly discussed in this section. If the Plan is amended in the future or conditions as presented herein change, these effects will have to be re-evaluated to ensure that they are still deemed not to be significant.

Agricultural Resources

Implementation of the Plan would not convert farmland to nonagricultural use. The project area is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Thus, the proposed Plan would not have a substantial adverse effect on agricultural resources.

Environmental Justice

The objectives of Executive Order (EO) 12898, Environmental Justice, include identification of disproportionately high and adverse health and environmental effects on minority populations and low-income populations that could be caused by a proposed federal action. Accompanying EO 12898 was a Presidential Transmittal Memorandum that referenced existing federal statutes and regulations, including NEPA, to be used in conjunction with the EO. The Council on Environmental Quality (CEQ) issued *Guidance Under NEPA* in December 1997 (CEQ 1997). Minority populations include all persons identified by the U.S. Census of Population and Housing to be of Hispanic origin, regardless of race, and all persons not of Hispanic origin other than White (i.e., Black, American Indian, Eskimo or Aleut, Asian or Pacific Islander, or other race). Income levels vary widely in neighborhoods near treatment areas.

No formal, commonly accepted significance criteria have been adopted for Environmental Justice impacts. However, the Presidential Memorandum accompanying the EO directs federal agencies to include measures to mitigate disproportionately high and adverse environmental effects of proposed federal actions on minority and low-income populations. Federal agencies also are required to give affected communities opportunities to provide input into the NEPA process, including identification of mitigation measures. No specific significance thresholds have been developed. Application of EO 12898 to NEPA documentation suggests two questions should be examined:

- Is a federal project with significant adverse environmental impacts being proposed in a community comprised largely of minority or low-income persons?
- Would any significant adverse human health or environmental effects of the project disproportionately affect minority or low-income persons?

No aspect of the Plan or the implementing alternatives would result in disproportionately high and adverse human health or environmental effects on minority or low-income populations. Any restrictions on travel or access to areas of the project area that might result from implementation of the Plan would be equally applied to all visitors, regardless of race or socioeconomic standing. Furthermore, none of the action alternatives would change current management direction with respect to housing policies in the project area or vicinity. Policies concerning the future availability of housing in these areas are already in place and would not change as a result of the project. Therefore, the Plan and project alternatives would not result in the destruction or disruption of community cohesion and economic vitality, displacement of public and private facilities and services, and/or exclusion or separation of minority or low-income populations from the broader community.

Geology and Soils

While the project area is seismically active, the Plan does not permit development of permanent facilities in known risk areas and requires geologic studies before development. It also requires site-specific geotechnical investigations for siting and design of permanent structures, campgrounds, roads, and trails to mitigate potential damage from unstable soil, landslides, and earthquakes. The risk related to a seismic event would not increase from current conditions as a result of the implementation of the Plan.

Hazards and Hazardous Materials

Implementation of the Plan would not result in the release of hazardous substances, create a health hazard, expose people to any existing sources of health hazards, or increase a fire hazard. Implementation of the Plan would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, as no unusual use of hazardous materials is anticipated. Use of hazardous materials, as defined by and regulated through the California Code of Regulations, is expected to be limited to the periodic use of pesticides and herbicides in conjunction with maintenance of the landscaping and control of invasive plants, and use of motor oils, gas, etc., for employee vehicles and maintenance equipment. Application and storage of these substances in accordance with the manufacturers' specifications would not pose any significant hazards. This use would not cause a significant hazard to the public or result in a foreseeable upset or accident condition. Phase I assessments should be conducted when any areas of the project area are suspected of potential contamination, and before future acquisitions or securing of easements. Future projects would be subject to further, more detailed review. Should any hazardous substances or other health hazards be identified, appropriate warning and protective methods would be developed and implemented.

Land Use and Planning

The Plan provides guidelines for future land use and development and is consistent with the Merced County General Plan. The Plan would not physically divide an established community or conflict with any Habitat Conservation Plan (HCP) or Natural Communities Conservation Plan (NCCP); therefore, it would not cause an adverse change in the environment related to land use and planning.

Energy and Mineral Resources

The Plan policies encourage resource conservation and recreational uses for the project area. The potential development and improvements recommended in the Plan would require minimal amounts of energy, would not require additional energy capacity to serve the project area, and would not adversely affect peak- and base-period demands for electricity. The Plan includes the protection of large expanses of undeveloped land and would not preclude the development of any mineral resources if found in the future. Therefore, the proposed Plan would not have an adverse impact on the environment related to mineral resources.

Socioeconomics

Implementation of the Plan would not result in impacts related to population, employment, or housing. The Plan would not induce substantial population growth in the area, as it does not propose any substantial new housing or businesses. The Plan would not displace any people or housing, necessitating

the construction of housing elsewhere. Implementation of the Plan could result in an increased need for staff, but it is unlikely that the number of new jobs generated would be significant or exceed the projected job growth in the area.

4.3 ENVIRONMENTAL SETTING

Refer to Section 2, Existing Conditions of this Plan for a description of the existing project area environment, significant resource values, and the local and regional vicinity.

4.4 ENVIRONMENTAL CONSEQUENCES

Regulations, Assumptions and Methods for Evaluating Impacts

This section presents a summary of federal regulations and policies that guide and limit management actions, listed by topical area, and the methods and assumptions used to assess the impacts on each topic. Applicable State laws and regulations for each resource are listed in Chapter 2. State and federal impact criteria used for evaluating impacts are provided with each resource topic below. In all instances, the most restrictive impact criteria were used for evaluating impacts of the Plan.

Summary of Federal Regulations and Policies

Water Quality

The Clean Water Act strives to "restore and maintain the chemical, physical, and biological integrity of the Nation's water." To achieve this objective, the Act sets forth the following goals: "(1) that the discharge of pollutants into the navigable waters of the United States be eliminated by 1985; (2) that as an interim goal there be attained by 1983 water quality which provides for the protection and propagation of fish, shellfish and wildlife, and provides for recreation in and on the water; (3) that the discharge of toxic pollutants in toxic amounts be prohibited; (4) that Federal financial assistance be provided to construct publicly owned waste treatment works; (5) that area wide waste treatment management planning processes be developed and implemented to assure adequate control of source pollutants in each State; (6) that a major research and demonstration effort be made to develop technology necessary to eliminate the discharge of pollutants into navigable waters, waters of the contiguous zone, and the oceans; and (7) it is the national policy that programs for the control of non point sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and nonpoint sources of pollution."

The basic means to achieve the goals of the Act is through a system of water quality standards, discharge limitations, and permits. The Act authorizes the U.S. Environmental Protection Agency (USEPA) to require owners and operators of point source discharges to monitor, sample, and maintain effluent records. If the water quality of a water body is potentially affected by a proposed action (i.e., construction of a wastewater treatment plant), a National Pollutant Discharge Elimination System (NPDES) permit (Section 402) may be required. In most cases the USEPA has turned this responsibility over to the states as long as the individual state program is acceptable to the Agency.

Similarly, if a project may result in the placement of material into waters of the United States, a USACE Dredge and Fill Permit (Section 404) may be required. It should be noted that the 404 permit also

pertains to activities in wetlands and riparian areas. Prior to the issuance of either an NPDES or 404 permit, the applicant must obtain a Section 401 certification. This declaration states that any discharge complies with all applicable effluent limitations and water quality standards. Certain federal projects may be exempt from the requirements of Section 404 if the conditions set forth in Section 404(r) are met.

Section 319, Nonpoint Source Management Programs, was added to the Clean Water Act by P.L. 100-4. The purpose of this section is to have the states establish nonpoint source management plans designed to deal with each state's nonpoint source pollution problems. Section 319 (k) requires each federal department and agency to allow states to review individual development projects and assistance applications and accommodate, in accordance with Executive Order 12372, the concerns of the state regarding the consistency of these applications or projects with the state nonpoint source pollution management program.

The Safe Drinking Water Act provides for the safety of drinking water supplies throughout the United States by establishing national standards of which the states are responsible for enforcing. The Act provides for the establishment of primary regulations for the protection of the public health and secondary regulations relating to the taste, odor, and appearance of drinking water. Primary drinking water regulations, by definition, include either a maximum contaminant level (MCL) or, when an MCL is not economically or technologically feasible, a prescribed treatment technique that would prevent adverse health effects to humans. An MCL is the permissible level of a contaminant in water that is delivered to any user of a public water system. Primary and secondary drinking water regulations are stated in 40 CFR 141 and 143, respectively.

Air Quality

The Clean Air Act (42 U.S.C. 7401 and Amendments of 1970) "protects and enhances the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population; to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution; to provide technical and financial assistance to state and local governments for aid in their development and execution of air pollution control programs; and to encourage and assist the development and operation of regional air pollution control programs."

The Act requires the USEPA to publish national primary standards to protect public health and more stringent national secondary standards to protect public welfare (40 CFR 50). States and local governments are responsible for the prevention and control of air pollution. States, which are divided into air quality control regions, are required to submit State Implementation Plans (SIPs) for USEPA approval (40 CFR 51). SIPs provide strategies for implementation, maintenance, and enforcement of national primary and secondary ambient air quality standards for each air quality control region.

Other provisions of the Act include: 1) standards of performance for new stationary sources, 2) motor vehicle emission and fuel standards, 3) national emission standards for hazardous air pollutants, 4) a study of particulate emissions from motor vehicles, and 5) a study of the cumulative effect of all substances and activities that may affect the stratosphere, especially ozone in the stratosphere.

Wetlands

Wetland protection and management programs are based primarily on the requirements of the National Environmental Policy Act, the Clean Water Act, their respective implementing regulations, and Executive Order 11990, (Protection of Wetlands, 1977). Executive Order 11990 requires a construction agency to: "...avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative." Executive agencies, in carrying out their land management responsibilities, are to take action that will minimize the destruction, loss, or degradation of wetlands, and take action to preserve and enhance the natural and beneficial values of wetlands. Each agency shall avoid undertaking or assisting in wetland construction projects, unless the head of the agency determines that there is no practicable alternative to such construction and that the proposed action includes measures to minimize harm.

Some activities in wetlands are regulated by the USACE under section 404b of the Clean Water Act. Section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act require USACE permits to regulate discharge of dredged and fill material and incidental discharges associated with the excavation activities within waters and wetlands of the United States. The USACE issues permits under section 404 of the Clean Water Act for activities that discharge dredged or fill material into waters of the United States, including wetlands. Regulated activities range from placing fill for building pads to discharge assumed to occur as a result of mechanized land clearing or excavation in wetlands. The USACE section 404b guidelines specify a three-step process for meeting a national policy of no net 1oss of wetlands: 1) avoidance – finding another alternative that does not involve wetlands damage, 2) minimization – minimizing the wetlands impact of the project design, and then, only after the first two conditions have been met, 3) mitigation – compensating for the unavoidable wetlands damage.

The term "mitigation" includes a spectrum of actions that are defined by the CEQ as:

- Avoid the impact altogether by not taking an action or certain parts of an action.
- Minimize the impacts by limiting the degree or magnitude of the action and its implementation.
- Rectify the impact by repairing, rehabilitating, or restoring the affected area.
- Reduce or eliminate the impact over time by preservation and maintenance operations.
- Compensate for the impact by replacing or providing substitute resources or environments.

Wetlands in the project area have been identified based on the National Wetlands Inventory (NWI) maps, on site visits, and from a general understanding of the topography and vegetation of the area. The USACE defines wetlands according to the criteria found in the 1987 USACE Wetlands Delineation Manual. The USACE's definition of wetlands requires that all three wetland criteria (soils, hydrology, and vegetation) be met for an area to be defined as a wetland. NWI maps are assumed to closely approximate wetland types and the general location.

NWI maps are prepared primarily from aerial photographs with limited field checking. The presence of wetlands in an area as depicted on an NWI map is considered a preliminary site assessment. Extensive field work is required to identify the hydric soils, hydrophytic vegetation, and hydrologic regime that define wetlands. It is not possible to determine area, function, and values of affected wetlands without site-

specific information on the location of projects and the extent of work required. Areas and types of wetlands affected by proposals are estimates based on experience with similar types of projects. NWI maps do not show all wetlands that are actually present. NWI maps are designed so that if a site is depicted as containing a wetland, it is highly likely that a wetland is there. However, a site may also contain unmapped wetlands, especially those that are very small, or that are drier in some seasons, or that are difficult to interpret from aerial photographs, such as evergreen forested wetlands or significantly drained wetlands. General impacts on wetlands are analyzed and assessed using field survey data and the best professional judgment of planners, hydrologists, soil scientists, and botanists based on comparison of similar projects in the region.

Vegetation

The Invasive Species Act of 1999 was enacted to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause. The Act outlines the duties of federal agencies whose actions may affect the status of invasive species, provides for the formation of an Invasive Species Council, and requires the preparation of an Invasive Species Management Plan.

Threatened and Endangered Species

The Endangered Species Act of 1973 provides protection for animal and plant species that are currently in danger of extinction (endangered) and those that may become so in the foreseeable future (threatened).

Section 7 of this Act requires federal agencies to ensure that all federally associated activities within the United States do not have adverse impacts on the continued existence of threatened or endangered species or on designated areas (critical habitats) that are important in conserving those species. Action agencies must consult with the USFWS, which maintains current lists of species that have been designated as threatened or endangered, to determine the potential impacts a project may have on protected species. Section 9 of the Act prohibits any person subject to U.S. jurisdiction to possess, sell, deliver, carry, transport, or ship any species listed under this Act, except by authorized permit.

The USFWS has established a system of informal and formal consultation procedures. USFWS preparation of a "Biological Opinion" will conclude formal consultation. The result of informal or formal consultations with the USFWS under Section 7 of the Endangered Species Act Amendments of 1978 should be described and documented in the EIS.

The Federal Water Project Recreation Act of 1965 states that federal agencies in planning navigation, flood control, reclamation, hydroelectric, or multi-purpose water resource projects must consider the potential outdoor recreational opportunities and potential fish and wildlife enhancement that the project might afford. If both purposes can be served by the project, it shall be constructed, operated, and maintained accordingly.

Also, project construction agencies shall encourage nonfederal public bodies to administer project land and water areas for recreation and fish and wildlife enhancement purposes, and operate, maintain, and replace facilities used for these purposes.

The Fish and Wildlife Coordination Act of 1958 provides that wildlife conservation receive equal consideration and be coordinated with other features of water-resource development programs. Sections 1 and 2 of the Fish and Wildlife Coordination Act (FWCA) mandates that fish and wildlife receive equal consideration with water resources development programs throughout planning, development, operation, and maintenance. Whenever Reclamation proposes to impound, divert, channelize, or otherwise alter or modify any stream, river, or other body of water for any purpose, Reclamation must first consult and coordinate its actions and projects with the USFWS and the affected state fish and game agency(ies) wherein the impoundment, diversion, or other control facility is to be constructed. This consultation and coordination will address ways to conserve wildlife resources by preventing loss of and damage to such resources as well as to further develop and improve these resources.

The USFWS is authorized to survey, investigate, prepare reports, and recommend methods to determine the possible damage to wildlife resources and to determine means and measures that should be adopted to prevent the loss of or damage to such wildlife resources, as well as to concurrently develop and improve such resources. The FWCA report shall be made a part of any Reclamation report submitted to Congress. Reclamation shall give full consideration to the report and recommendations and to any report of the state agency. The project plan shall include such justifiable fish and wildlife means and measures as Reclamation determines necessary to obtain maximum overall project benefits.

The usual USFWS procedure is to provide Reclamation with periodic planning aid memorandums or planning aid letters throughout the planning process, and to provide an FWCA report at the conclusion of the planning process. The USFWS planning aid memorandums should be made a part of any interim planning report, and the FWCA report should be made a part of the Environmental Assessment (EA) or EIS.

The recommendations of the USFWS must be summarized in the EA or EIS and responses made to each recommendation. This summary is usually made a part of the Consultation and Coordination section. If a recommendation was not included in the plan, the reasons the recommendation was not justifiable must be given. Additional details on FWCA compliance are found in RI 376.13.

Cultural and Historic Resources

Reclamation is mandated to preserve and protect its cultural resources through the organic act of 1916 (V.S.C. Title 16) and such specific legislation as the Antiquities Act of 1906 (16 V.S.C. 431), the National Historic Preservation Act of 1966, as amended (16 V.S.C. 470), the National Environmental Policy Act of 1969, as amended (42 V.S.C. 4321,4331,4332), and the Archeological Resources Protection Act of 1979 (16 V.S.C. 470).

The Antiquities Act of 1906 was the first general act providing protection for archeological resources. It protects all historic and prehistoric sites on federal lands, and prohibits excavation or destruction of such antiquities without the permission (Antiquities Permit) of the Secretary of the Department having jurisdiction. It also authorizes the President to declare areas of public lands as National Monuments and to reserve or accept private lands for that purpose. Applicable regulation is 43 CFR 3, Antiquities Act of 1906.

The National Historic Preservation Act of 1966 establishes as federal policy the protection of historic sites and values in cooperation with other nations, states, and local governments. It establishes a program of grants-in-aid to states for historic preservation activities. Subsequent amendments designated the State Historic Preservation Officer (SHPO) as the individual responsible for administering programs in the states.

The Act also creates the President's Advisory Council on Historic Preservation. Federal agencies are required to consider the effects of their undertakings on historic resources, and to give the Advisory Council a reasonable opportunity to comment on those undertakings. The NEPA process requires that an evaluation be conducted to determine whether a proposed action will affect districts, sites, structures, or objects listed in or eligible for listing in the National Register of Historic Places (National Register); it is then determined whether the effect is adverse.

Reclamation uses three levels of surveys to locate and identify cultural resources. Consultation with the appropriate SHPO is necessary at appropriate times during and after such surveys. A class I survey is primarily a literature/archival search. It also includes contacting the SHPO; State Archeologist; State Historian; State Historical Society; and/or other appropriate individuals, agencies, or institutions to determine what cultural resources may be present in an area and what kind of additional information may be needed for an adequate inventory of cultural resources. A class II survey evaluates the resources based on a sample that can serve as an indicator of resources present in the entire area to be affected. This type of survey would normally be an on-the- ground examination of a statistically valid sample of the total survey area and may include remote sensing and/or geo-morphological investigations or other appropriate techniques. A class III survey consists of an intensive on-the-ground examination of all the areas to be affected by Reclamation action or on lands under Reclamation's administration. A class III survey may require test excavations or other specialized studies for the purpose of evaluating the significance of cultural resources.

The American Indian Religious Freedom Act of 1978 makes it a policy of the government to protect and preserve for American Indians, Eskimos, Aleuts, and Native Hawaiians their inherent right of freedom to believe, express, and exercise their traditional religions. It further directs various federal departments, agencies, and other instrumentalities responsible for administering relevant laws to evaluate their policies and procedures in consultation with Native traditional religious leaders to determine changes necessary to protect and preserve Native American cultural and religious practices.

The Archaeological Resources Protection Act of 1979 supplements the provisions of the 1906 Antiquities Act. The law makes it illegal to excavate or remove from federal or Indian lands any archeological resources without a permit from the land manager. Permits may be issued only to educational or scientific institutions, and only if the resulting activities will increase knowledge about archeological resources.

The Archeological and Historic Preservation Act of 1974 was created when Congress amended the Reservoir Salvage Act to extend the provisions of the Act to all federal construction activities and all federally licensed or assisted activities that will cause loss of scientific, prehistoric, or archeological data. It requires the Secretary of the Interior (Secretary) to coordinate this effort, and to report annually to the Congress on the program. It permits agencies either to undertake necessary protection activities on their own or to transfer to the Secretary up to one percent of the total authorized for expenditure on a federal or federally assisted or licensed project to enable the Secretary to undertake the necessary protection activities.

Executive Order 11593, 1971 (Protection and Enhancement of the Cultural Environment) requires federal agencies to take a leadership role in preservation by surveying all lands under their ownership or control and nominating to the National Register all properties that appear to qualify. It also requires agencies to avoid inadvertently destroying such properties prior to completing their inventories (codified as part of 1980 amendments to the National Historic Preservation Act).

As a state agency, the Department is obligated to conform to the cultural resource provisions of CEQA. However, CEQA standards are, in large part, superseded by the federal regulatory framework, as the project lands are situated entirely on federal property; in this case Reclamation land. Although Reclamation maintains ownership of the land, a Memorandum of Understanding (MOU) between Reclamation and the Department applies. This MOU requires that any cultural resource studies conducted within the SRA conform to Section 106 standards.

Assumptions and Methods for Assessing Impacts

The purpose of this section is to identify impacts of the Plan that have the potential for significance and will require more detailed analysis when specific management plans and area development plans are prepared. Impact analyses and conclusions are based on interdisciplinary team knowledge of resources and the project area, reviews of existing literature, and information provided by experts in Reclamation, the Department, and other agencies. Any impacts described in this section are based on the conceptual plan of the project alternatives under consideration as described in the Plan in Chapter 3, and the data and information used for projecting impacts per the existing conditions described in Chapter 2. The management alternatives have been configured to maximize benefits and minimize adverse effects on both ecosystem function and the human environment. In the absence of quantitative data, best professional judgment prevailed, as protocol surveys and complete baselines data collection was not conducted as part of this planning effort.

Under NEPA, the significance of an impact is determined considering the context in which the impact would occur and the intensity of the action. The significance of an action must be analyzed based on society as a whole, affected interests, the affected region, and the locality in which it would occur. Significance, therefore, will vary depending upon the setting of the proposed action (40 CFR 1508.27[a]). According to the CEQA Guidelines Section 15382, a significant impact on the environment refers to a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance." Significant environmental impacts may be associated with visitor use, facility construction or rehabilitation, or development projects, and adverse impacts can range from negative visual impacts to degradation of water quality to the disturbance or loss of cultural and natural resources.

Under CEQA, an EIR is required to determine whether impacts of each alternative are significant, and, if so, whether identified mitigation measures would reduce those impacts to "less than significant" levels. Therefore, "thresholds" or criteria have been developed to describe levels of impact. Thresholds are standards used to determine if an activity or project will cause, or potentially cause, a substantial adverse physical change (significant impact). If the project or activity could exceed a threshold, the impact is considered to be potentially significant.

Where potentially significant impacts are noted, the EIS/EIR identifies "mitigation measures." If appropriate mitigation can reduce the impact to below the threshold, the impact is then considered less than significant. "Mitigation" is defined as an action or actions that will:

- Avoid a given impact altogether by not taking a certain action or parts of an action;
- Minimize a given impact by limiting the degree or magnitude of the action and its implementation;
- Rectify a given impact by repairing, rehabilitating, or restoring the impacted environment;
- Reduce or eliminate a given impact over time through preservation and maintenance operations during the life of the action; or
- Compensate for a given impact by replacing or enhancing substitute resources or environments (CEQA Guidelines Section 15370).

As discussed above, this Plan is a first tier EIS/EIR and, as such, the description of proposed development, program impacts, and associated mitigation are general in nature. The proposed plan goals and guidelines were developed to ensure that the alternatives are self-mitigating. As additional management plans, area development plans, or specific projects are proposed or developed, they will be subject to further environmental review; project-specific mitigation measures will be developed and implemented at that time. The following potential impacts and associated mitigation measures refer to proposals planned within the existing project area boundaries. Following the impact discussion for each resource area, Table 4-3 provides a summary of environmental consequences.

Hydrology and Floodplain

Hydrology refers to hydrologic processes such as flooding, erosion, deposition, and channel movement. Water quality, particularly the enhancement or degradation of water quality relates to and has an effect on the suitability of surface water for recreational use and wildlife habitat, The Clean Water Act requires the Department and Reclamation to comply with federal, state, interstate, and local requirements; administrative authority; and sanctions with respect to the control and abatement of water pollution.

Impact Summary

With implementation of the Plan, any potentially significant impacts on hydrology and water quality would be avoided through sensitive design and siting of facilities and other land uses. In addition, goals and guidelines would be in effect to avoid any potential impacts or limit them to a less-than-significant level.

Environmental Evaluation

Development provided for under Alternatives 2, 3, and 4 has the potential to impact hydrology, water quality, and groundwater supplies within the project area including body contact activities and the potential to increase the presence of fecal coliform bacteria. . Under Alternative 1, No Action/No Project Alternative, no significant impacts to hydrology, water quality and groundwater have been documented. However, since water quality monitoring is not currently occurring at Los Banos Reservoir, continued and increased use of this area under Alternative 1 could result in potential significant impacts over time. None of the hydrologic or water quality effects of Alternatives 2, 3 or 4 would meet or exceed the impact criteria. The development of new facilities and, in some instances, the addition of new paved surfaces would increase the impermeable surface area within the project area, thereby resulting in

an increase in runoff—and potential polluted runoff—in developed areas. With Alternatives 3 and 4, increases in vehicle traffic associated with new facilities and the anticipated increase in visitor use would also increase vehicle-related pollution in runoff, including rubber, metals, oil and gasoline, and other vehicle-related chemicals. Moreover, increased water-based recreation and associated water pollution, primarily resulting from chemicals released from motorized water craft and from body contact, have the potential to degrade water quality in the three reservoirs.

Alternatives 3 and 4 also have the potential to impact both water quality and hydrology in the Panoche-San Luis Reservoir watershed. These alternatives may increase recreational activity and have greater water demand and water-based recreation impacts to water quality through the increase of camping, day use, group events and the construction of a marina at O'Neill Forebay. Alternative 4 would have the most vehicle-related polluted runoff and erosion and sedimentation due to the creation of an internal access road from Gonzaga Road to Los Banos Creek Use Area and a trail to Basalt Use Area. With regard to the Off Highway Vehicle (OHV) Use Area, Alternatives 2 and 3 would maintain existing impacts and Alternative 4 could potentially increase runoff through the increase in impermeable surfaces. Overall, Alternative 2 would have the least impact to hydrology and water quality due to reduced facility additions and improvements, and Alternative 4 would have slightly higher impacts than Alternative 3 due to the trail and road connections and an increase in OHV use in its current location.

Construction activities associated with development under this Plan, including digging, grading, filling, and paving, also have the potential to impact hydrology and water quality through increasing erosion, sedimentation, and polluted runoff. Construction activities would expose loose soils, potentially increasing erosion and siltation. In addition, construction would utilize a variety of construction equipment and related chemicals, potentially resulting in the accidental release of vehicle- and construction-related chemicals into surface water and groundwater. Construction activities therefore have the potential to result in short-term effects to water quality within the project area. Alternatives 3 and 4 would have similar levels of construction impacts to water quality, while Alternative 2 would have less impacts. As the project area includes few flood-prone areas and development is not proposed in these areas, the Plan would have no impact associated with flooding and floodplains.

Mitigation

The goals (RES-WQ1 through RES-WQ4) and associated guidelines found in Chapter 3 will serve to minimize or eliminate the potential for impacts on hydrology and water quality associated with Plan implementation. Water quality monitoring will assist in ensuring that recreational uses and other pollutants are kept within acceptable levels. The Plan proposes to continue monitoring at existing locations and to add a monitoring program at Los Banos Reservoir. In addition, project-specific mitigation measures will be developed and implemented on a project-by-project basis.

Impact Criteria (Hydrology and Floodplain)

The water quality analysis utilized criteria from Appendix G of the state CEQA guidelines; these are provided below for reference only, as the Plan has been designed to prevent significant impacts to hydrology, water quality, or floodplains through avoiding an increase in development in a floodplain or drainage area or increasing the potential for stormwater runoff into surface waters and other activities that would contribute to significant impacts to hydrology, water quality or floodplains. Pursuant to the CEQA criteria listed below, the Plan does not propose activities that would:

- Violate any water quality standard or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite;
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map;
- Place within a 100-year flood hazard area structures that would impede or redirect floodflows; or
- Expose people or structures to significant risk of loss, injury, or death involving flooding, including that due to dam or levee failures, seiche, tsunami, or mudflow.

Air Quality

Impact Summary

With implementation of the Plan, impacts on air quality would be avoided by following the San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD) Guide for Assessing and Mitigating Air Quality Impacts therefore, air quality impacts resulting from this project would be less than significant.

Environmental Evaluation

Alternatives 1, 2, 3, and 4 do not allow for the introduction of stationary sources of air pollution into the project area, however 2, 3 and 4 provide for increased visitor use and associated vehicle travel, as well as for construction of visitor, operations, and maintenance facilities. By providing additional facilities and attracting additional visitors, implementation of the Plan may result in increased vehicle traffic to, from, and within the project area. Vehicle and personal watercraft emissions, including ozone precursors, carbon monoxide, nitrogen and sulfur oxides, and particulate matter, would present a potential impact to air quality. However, the indirect effect of increasing vehicle traffic in the region associated with implementation of this Plan would result in only a minor increase in total vehicular emissions in the area. Alternatives 3 and 4 would result in the most additional vehicular emissions; Alternative 4 would be greater than Alternative 3 due to the creation of an internal access road. Alternatives 1 and 2 would result in the least emissions of the four alternatives.

Similarly, activities and motor-driven equipment used during construction of project area facilities, particularly digging, grading, and paving, would generate additional ozone precursors, carbon monoxide, nitrogen and sulfur oxides, and particulate matter in the recreation area. This impact would be greatest for Alternatives 3 and 4, less for Alternative 2 and the least amount for Alternative 1, which would involve the lowest level of construction.

Mitigation

Future baseline data should include existing project area air quality measurements to assist in monitoring changes in air quality during Plan implementation. Additionally, mitigation measures to be considered for planning, implementation, and construction are detailed in the SJVUAPCD's Guide for Assessing and Mitigating Air Quality Impacts and are as follows:

- Apply county general plan policies, local ordinances, and state and federal policies;
- Provide pedestrian/transit-oriented design elements where appropriate and feasible;
- Provide traffic flow improvements for areas impacted by plan proposals, where practicable;
- Cover or water (twice daily) all active construction areas; disturbed areas; stock piles; and trucks hauling soil, sand, and other loose materials at least twice daily;
- Water (twice daily) or pave all access roads, parking areas, and staging areas;
- Control fugitive dust emissions from clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities through watering or presoaking;
- Sweep paved areas and roads to remove the accumulation of mud or dirt;
- Hydroseed or apply nontoxic soil stabilizers to inactive construction areas, and replanting of vegetation in disturbed areas as quickly as possible;
- Limit traffic speeds on unpaved roads to 15 mph and minimizing construction vehicle idle time; and
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Design site layout and development to minimize the number of vehicle trips in the project area, thereby reducing vehicle-related emissions. In addition, minimize construction-related vehicle trips through carpooling and elimination of unnecessary trips during project construction.
- Use best-available technology in all furnaces, boilers, engines, and other lodging- and visitor-related air pollutant sources associated with new buildings and facilities.

Impact Criteria (Air Quality)

The air quality analysis utilized criteria from Appendix G of the state CEQA guidelines; these are provided below for reference only, as the Plan has been designed to prevent significant impacts to air quality through avoiding an increase in activities and actions that would contribute to air pollution. Pursuant to the CEQA criteria listed below, the Plan does not propose activities that would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

Noise

Impact Summary

Implementation of the Plan would not result in significant impacts on noise.

Environmental Evaluation

The project alternatives propose development of new facilities that have the potential to result in increased visitor use, as discussed above. An increase in visitor use would be accompanied by an increase in vehicle and visitor-related noise in the project area, including talking, shouting, and noise from motorboats and personal water craft. Increased noise from vehicular use would be greatest under Alternative 4, which includes a new connecting road between Los Banos Reservoir and Gonzaga Road, as well as expansion of the OHV area. Alternatives 2 and 3 also would increase noise associated with various recreational activities, with Alternative 2 resulting in the smallest increase. Current noise levels resulting from Alternative 1 have not been documented however certain activities such as jet-skiing may result in temporary noise levels above accepted standards but do result in ambient noise levels above existing levels. All of the action alternatives could result in increased noise in developed recreation areas and, to a far lesser degree, in certain backcountry areas. However, under Alternatives 2 and 3, increased vehicle and visitor-related noise would occur primarily within the Frontcountry (FC) and Administration and Operations (AO) Zones where higher ambient noise levels are most compatible. Some noise conflicts between different types of recreational uses could occur if not mitigated. In addition to vehicle- and visitor-related noise, implementation of the Plan would result in construction-related noise during construction activities; however, these would be temporary and localized.

Mitigation

Impacts associated with construction-related noise would be minimized through the implementation of standard noise abatement measures such as:

- Develop a construction schedule that minimizes impacts on project area visitors and residents; using best-available noise control techniques wherever feasible; locating stationary noise sources as far from sensitive uses as possible; and erecting temporary noise barriers between construction areas and housing and camping areas.
- Consider privacy and noise screening in the design and layout of new and relocated campsites and housing.
- Apply noise-reducing technology to vehicles and equipment associated with the project and construction activities where possible.

Potential noise conflicts between recreational uses would be mitigated to less than significant by careful review of locations of each use with respect to noise/land use compatibility prior to final design and location of specific facilities. Regulations regarding use of facilities (such as requirements for mufflers on OHVs, and other noise attenuation features) will be developed and required where noise/land use conflicts may occur. Additionally, future baseline data should include existing noise measurements to assist in monitoring changes in noise quality and quantity during Plan implementation.

Impact Criteria (Noise)

The noise analysis utilized criteria from Appendix G of the state CEQA guidelines; these are provided below for reference only, as the Plan has been designed to prevent significant impacts to noise through avoiding an increase in activities and actions that would contribute to noise pollution. Pursuant to the CEQA criteria listed below, the Plan does not propose activities that would:

- Generate or expose persons to noise levels in excess of standards established in the local general plan or noise ordinance, specific plan, or other land use plan;
- Generate or expose persons to excessive groundborne vibration or noise levels;
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above existing levels; or
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing levels.

Biological Resources

Vegetation

Impact Summary

With implementation of the Plan, potentially significant impacts on vegetation would be avoided through sensitive design and siting of facilities and other land uses. In addition, goals and guidelines would be in effect to avoid any potential impacts or limit them to a less-than-significant level.

Environmental Evaluation

The project area provides important habitat for many plant and wildlife species. It also includes a number of vegetation types that are considered sensitive, including black willow riparian woodland, iodine bush scrub, mesic herbaceous, and grasslands that are dominated by native species. Black willow riparian and mesic herbaceous are considered sensitive and may be regulated under state and federal law. The project area also provides suitable habitat for a number of special-status plants. As described below, implementation of Alternatives 2, 3, and 4 would have the potential to affect existing vegetation, including sensitive habitats and state and federally protected waters of the U.S., including jurisdictional wetlands, based on the NWI inventory. Construction and maintenance of project area facilities could result in the loss, permanent alteration, and/or temporary disturbance of vegetation, including special-status plant species. Construction and postconstruction impacts on vegetation could also include the introduction of invasive plant species. Under Alternative 1, No Action/No Project Alternative, impacts to vegetation will be associated with the lack of a comprehensive management plan and subsequent actions related to invasive species control and other vegetation protection measures including annual vegetation and wetland monitoring, restoration programs and vegetation inventories.

Direct impacts anticipated on existing vegetation from Alternative 2 would result from development of some additional campsites, and other visitor facilities. Land-based facilities have the potential to require the removal or other disturbance of native vegetation, promote conditions for invasive species, and fragment wildlife habitat. Water-based facilities, proposed in all three alternatives including the

development of a new boat dock at San Luis Creek Use Area, as well as enhancing and reopening the boat launch at Medeiros Use Area and other water-based facilities at O'Neill Forebay and Dinosaur Point Use Area, could adversely affect wetlands by degrading wildlife habitat through removal or disturbance to wetland vegetation and erosion and sedimentation into adjacent surface waters. Additionally, Alternative 3 proposes the exploration of dredging or the removal of sandbars in certain limited areas of O'Neill Forebay for windsurfer safety and to counteract low water levels. This work has the potential to disturb wetlands and surface waters during the dredging and removal operation; however, more information regarding the areas needing this work and the associated wetland habitat would be collected prior to seeking the appropriate permits to conduct this work.

Direct impacts of Alterative 3 would be similar to, but greater than, those described above for Alternative 2 due to more visitor use facilities, including the addition of up to 200 new campsites at Medeiros Use Area and campground additions at San Luis Creek Use Area, Basalt Use Area, Dinosaur Point Use Area and Los Banos Creek Use Area. In Alternatives 3 and 4 the Basalt Use Area campground would be reconfigured to allow for larger RVs and a group camp for up to 60 people, which may require the removal of native vegetation and increased fragmentation of wildlife habitat. Alternatives 2 and 3 propose that the OHV area remain in its current location without expansion, while Alternative 4 proposes potential expansion of OHV Use Area. Expansion of this area may further reduce suitable habitat for certain wildlife species or special status plant species on this site, although more detailed surveys for this area would need to be conducted before expansion could occur.

Direct impacts of Alternative 4 would include fewer new campsites than Alternative 3 but more than Alternative 2. Development of an internal access road and trail connection from Los Banos Creek Use Area to Gonzaga Road and Basalt Use Area, respectively, could have both direct and indirect impacts on vegetation. Direct impacts include the potential loss of native vegetation to construct the road while longer-term, indirect impacts include the permanent fragmentation of open, undisturbed wildlife habitat and the disturbances associated with continuous use of this corridor by vehicular traffic, including the introduction of invasive species.

Development of project area facilities also could have adverse effects on special-status plant species. A total of 14 special-status plant species have a reasonable chance of occurring in the project area, and some of these could be adversely affected by development proposed under Alternatives 2, 3, and 4. Because intensive rare plant surveys have never been conducted in the project area, the presence or absence of these species has not been determined. Removal of occupied habitat for these species would be a potentially significant impact.

Additional indirect impacts on vegetation are expected to be associated mostly with the anticipated increase in visitor use, as proposed predominantly in Alternatives 3 and 4. These impacts are expected to be concentrated in the vicinity of new facilities, especially those that will attract substantial numbers of visitors. Visitors using new campsites, day use areas, interpretive facilities, and shoreline areas could trample and otherwise damage existing vegetation. While development of new hiking trails could result in significant direct effects on vegetation, use of these trails is not expected to significantly affect existing vegetation. The degree of impacts on vegetation would be determined largely by the proximity of campsites and other high use areas to habitats susceptible to degradation from recreational use (e.g., wetlands) and to populations of special-status species.

Mitigation

Goals and guidelines that describe the desired future condition of the project area require that efforts be made to minimize impacts on biological resources when future facilities are sited. With proper precautions, proposed facilities could be sited and constructed in a way that would not result in substantial impacts on existing vegetation. Facilities could be developed without loss or disturbance of trees, sensitive habitat, or special-status plants. In addition to all goals and guidelines that take vegetation into consideration, goals RES-V1 through RES-V5 serve as mitigation for potential impacts on vegetation and eliminate significant impacts. Additional mitigation measures common to all alternatives are provided below.

Wildlife

Impact Summary

With implementation of the Plan, potentially significant impacts on wildlife would be avoided through sensitive design and siting of facilities and other land uses. In addition, goals and guidelines would be in effect to avoid any potential impacts or limit them to a less-than-significant level.

Environmental Evaluation

Most of the wildlife present in the project area are regionally common but over 20 special-status wildlife species have been recorded within its boundaries or have the potential to occur. Construction and maintenance of new facilities and anticipated public use of new and existing facilities could result in loss and/or disturbance of wildlife habitat and could reduce the number of individuals of species. These impacts are not expected to substantially affect the distribution or abundance of any common wildlife species. However, impacts on some special-status wildlife species would be potentially significant.

Impacts on most wildlife species found in the project area would be less than significant because construction of the proposed facilities would require a relatively small amount of ground disturbance. None of the proposed facilities would remove large tracts of wildlife habitat and none would substantially reduce opportunities for wildlife movement. Impacts on special-status species that could result from implementation of Alternative 1 (No Action) would be considered less than significant and would be associated with the lack of a comprehensive wildlife management plan including future wildlife surveys.

Under Alternative 2, special-status wildlife species that would be at greatest risk of being significantly affected by the development of new facilities and other project activities would include those known to occur in the vicinity of proposed facilities. Because fewer facilities requiring grading are proposed for Alternative 2 compared to Alternatives 3 and 4, most impacts on special-status species could probably be avoided using proper precaution during siting of those facilities (based on site-specific surveys and project-level environmental review).

Implementation of any of the alternatives would not have substantial adverse effects on wildlife movement because the large majority of the land in the project area would remain undeveloped. However, preserving and enhancing movement opportunities through the project area for the San Joaquin kit fox has been identified as a concern of the USFWS. The USFWS has suggested that opportunities to develop safe undercrossings on SR 152 for the kit fox and other wildlife species should

be explored in conjunction with proposed improvements to increase the safety for vehicles entering and leaving the project area (Harvey, pers. comm., 2003). Additionally, under Alternative 4, a new internal road is proposed to connect Los Banos Creek Use Area with Gonzaga Road. The potential for increased mortality of the kit fox and other special-status wildlife species due to increased vehicular traffic associated with increased visitor use would also be considered a potentially significant indirect impact for Alternative 4. This could also fragment existing, undisturbed wildlife habitat within the known kit fox corridor prescribed by Kit Fox Planning and Conservation Team (KFPACT). Further Information regarding kit fox and other species occupation of potential alignment areas would need to be collected before finalizing a plan for this access road. Appropriate design, including crossing opportunities, would be required.

Construction of facilities proposed for Alternative 3 could substantially affect a number of special-status species. With up to 200 new campsites proposed at Medeiros Use Area, habitat for San Joaquin kit fox, Swainson's hawk, burrowing owl, and tri-colored blackbird could be reduced. At Medeiros Use Area, the potential for substantial increased visitor use of the camping area needs to be developed to ensure protection of the tri-colored blackbird nesting colony located along the shore of O'Neill Forebay. Kit foxes and other nocturnal species may be adversely affected by increased lighting and noise associated with new campsites and other facilities. However, these facilities could be tightly clustered together in and around existing disturbed areas while leaving substantial large, open corridor opportunities available and preserving nesting and other habitat areas for other species, based on more definitive surveys. As with Alternative 3, Alternative 4 includes additional campsites at Medeiros Use Area; however, the maximum number of new sites would be slightly lower under Alternative 4. Adding tent sites at Los Banos Creek Use Area could adversely affect the kit fox, although this development would be confined to the existing developed area and consume minimal land area. This area is considered very important to the recovery of the kit fox by USFWS (Harvey, pers. comm., 2003).

The current OHV Use Area is located within an identified kit fox movement corridor, however the area is limited to 150 acres and therefore is not expected to have significant impacts on the kit fox. Additionally, improvements to the entry station access road at Los Banos Creek Use Area to prevent flooding could adversely affect habitat for the California red-legged frog and western pond turtle, although specific habitat areas would need further surveying and delineation prior to finalizing plans for flood prevention. The intention of this work to prevent flooding for passage through this area could serve to reduce degradation in this channel and ensure enhanced hydrologic flow through the construction of a bridge or similar structure. This would also eliminate trampling of this area and the opportunity for vehicular contaminants to affect any adjacent surface waters or stream channels.

Developing hiking trails that link Los Banos Creek Use Area with Basalt Use Area, as proposed under Alternative 4, could result in impacts on special-status species by increasing visitor use in previously undeveloped areas occupied by special-status wildlife species. Similar impacts could result from development of a trail linking Dinosaur Point to Pacheco State Park and DFG lands, as proposed under Alternative 3.

None of the alternatives would conflict with any approved HCPs or NCCPs, as no such plans have been approved in the region. The Santa Nella Community Specific Plan, which covers approximately 150 acres east of O'Neill Forebay and is anticipated to provide authorization for incidental take of San Joaquin kit fox, could be approved by the end of 2004. The USFWS is also in the early planning stages of initiating an HCP effort that will cover much of western Merced County (Harvey, pers. comm., 2003). Implementation of Alternative 4 would direct lead agencies to cooperate with other agencies in

development of, and participation in, the Merced County HCP. This regional HCP would be expected to benefit many of the special-status wildlife species found in the project area.

Mitigation

Goals and guidelines that describe the desired future condition of the project area require that efforts be made to minimize impacts on biological resources when future facilities are sited. With proper precautions, the proposed facilities could be sited and constructed in a way that would not result in substantial impacts on existing wildlife. Facilities could be developed without loss of or disturbance to sensitive habitat or special-status species. In addition to all goals and guidelines that take wildlife into consideration, goals RES-W1 through RES-W2 and associated guidelines serve as mitigation for impacts on wildlife and eliminate the potential for significant impacts. Additional mitigation measures common to all alternatives are provided below.

Impact Criteria (Biological Resources)

The biological analysis utilized standards derived from the environmental checklist in Appendix G of the CEQA Guidelines. These are provided below for reference only as the Plan has been designed to prevent significant impacts to biological resources through avoiding an increase in activities and actions that would contribute to the degradation of wildlife habitat, wetlands or native plants and communities. Pursuant to the CEQA criteria listed below, the Plan does not propose activities that would:

- Have a substantial adverse effect, either directly or indirectly through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by DFG or USFWS;
- Have a substantial adverse effect on any riparian or other sensitive natural community identified in local or regional plans, policies, and regulations, or by DFG or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

Cultural Resources

Impact Summary

With implementation of the Plan, impacts on cultural resources would be avoided through sensitive design and siting of facilities and other land uses. In addition, goals and guidelines would be in effect to avoid any potential impacts or limit them to a less-than-significant level.

Environmental Evaluation

Documented Cultural Resources

As described in Chapter 2, Existing Conditions, a total of 49 prehistoric and historic cultural resources have been identified within the project area. These include 37 within and in the immediate vicinity of San Luis Reservoir, 10 at Los Banos Reservoir, and an additional resource at O'Neil Forebay. In addition to these resources, a number of significant historic sites are known to exist within and in the area of the project area but have not been formally recorded. The most prominent of these known but not formally documented include the original site of the Rancho San Luis Gonzaga, and a toll road and precursor to SR 152 constructed by Andrew Firebaugh in 1857. In addition, although numerous cultural resource studies have been conducted within the SRA since the early 1960s, no inclusive systematic inventory of prehistoric and historic sites has been conducted. As a result, large portions of the project area have never been surveyed and numerous significant resources likely exist in the area.

Alternatives 2, 3, and 4 incorporate similar goals and could result in similar impacts on documented and unrecorded cultural resources. The effects on prehistoric and historic sites differ between the alternatives based on the extent of ground-disturbing activities associated with each alternative. The potential effects of each alternative are described below. Under Alternative 1, No Action/No Project Alternative, impacts to cultural resources are associated with the lack of a formal plan to inventory and monitor cultural resources. This could result in disturbance or destruction to cultural resources, particularly those that are not currently documented.

Of the three alternatives, Alternative 2 would have the least impact on documented cultural resources within the project area. This alternative consists primarily of activities such as potential guided tours, improving project area access on SR 152, and the enhancement of currently existing boating and camping facilities proposed for the San Luis Reservoir and O'Neil Forebay areas. These types of activities and their placement in areas where few or no cultural resources have been recorded, would result in a low effect on prehistoric and historic sites, features, and artifacts.

The proposed developments at Los Banos Creek Use Area include the addition of tent sites and the construction of an access road from I-5 to Los Banos. While enhanced access to the use area and the reservoir in general could increase indirect impacts to documented and unrecorded resources through increased visitor usage, only the proposed increase in tent sites at the use area could result in direct impacts to significant documented prehistoric resources. Two prehistoric housepit sites (CA-Mer-36 and CA-Mer-37) have been documented along the north shore of the reservoir. Although these two sites are inundated at least part of the year, a presumed increase in visitor use of this area could expose these resources to increased incidences of looting and other forms of disturbance.

As with Alternative 2, the preferred alternative proposes most of the development to occur in areas where no recorded prehistoric or historic resources are known to be present, or these developments would consist of low-level potential impacts, such as improved access to the project area from SR 152, and the addition of an RV loop at Basalt Use Area and campsites at the Medeiros Use Area where no sites have been noted.

However, two areas within the project area contain significant prehistoric resources that could be impacted by the proposed developments. Two sites at Los Banos Creek Use Area could be affected (see Alternative 2), and a total of eight sites could be subject to adverse impacts resulting from the construction, maintenance, and use of a multi-use trail linking Basalt Use Area with Pacheco State Park. Table 4-1 describes the sites that could be affected. Four of these sites are particularly sensitive as they are typically above the high water line of San Luis Reservoir. This year-round exposure in conjunction with a new trail could subject these resources to looting and other forms of visitor-induced disturbance, however the new development would be designed and constructed to avoid the potential for cultural resource degradation.

Table 4-1
Sites Potentially Impacted by the Basalt Use Area to Pacheco State Park Trail (arranged North to South)

Documented Cultural Resources at San Luis Reservoir Subject to Alternative 3 Impacts: Basalt Use Area to Pacheco SP Trail		
Site Number	Site Type	Comments
CA-Mer-83	prehistoric - midden	above high water line
CA-Mer-138	prehistoric - midden	above high water line
CA-Mer-42	prehistoric – midden	may be inundated part of year
CA-Mer-82	prehistoric – midden	may be inundated part of year
CA-Mer-41	prehistoric – midden	may be inundated part of year
CA-Mer-139	prehistoric – midden	above high water line
CA-Mer-32	prehistoric/historic	above high water line
CA-Mer-31	prehistoric - midden	may be inundated part of year

Alternative 4 could have the greatest potential to impact documented cultural resources within the project area. As with Alternatives 2 and 3, the majority of the facility developments are proposed to occur in areas where no prehistoric or historic resources have been documented. The development of an internal access road and trail link from Los Banos Use Area to Gonzaga Road and Basalt Area could impact presently undocumented cultural resources over a vast area, currently unsurveyed. Alternatives 3 and 4, with proposed highway improvements adjacent to SR 152 near San Luis Reservoir Dam could impact presently undocumented historic resources related to the original site of Rancho San Luis Gonzaga. The original land-grant period ranch and the Pacheco Adobe were located in an area now under the reservoir and dam, but related structure remains and features could still be present in the area. Although not formally surveyed or recorded, the Rancho site could still constitute a significant cultural resource and any related facility remains or features disturbed by project area activities would constitute a significant impact.

At Los Banos Reservoir, two prehistoric sites (CA-Mer-97 and CA-Mer-98) are situated in the general vicinity of the southernmost extent of a hiking trail proposed to extend from Basalt Use Area to Los Banos Creek Use Area. Although both of these sites are situated below the high water line during part of the year, such a trail would result in higher levels of visitation to the area, increasing the chances that the sites could be impacted by looting and other disturbances during low water level periods.

Unrecorded Cultural Resources

As noted previously, the project area has never been subjected to a complete cultural resources survey and the prehistoric and historic sites presently documented have been recorded as a result of numerous studies conducted in the area since the early 1960s. While the presently known sites cannot necessarily be considered representative of the cultural resources sensitivity of the project area and the surrounding vicinity, their presence does indicate that numerous similar sites are present in areas that have not been subjected to formal investigations. Due to this likelihood, future developments within the project area may have the potential to disturb cultural resources, however cultural resource goals and guidelines will prevent significant impacts to these resources.

Mitigation

Each alternative incorporates various actions designed to mitigate potentially adverse impacts on cultural resources resulting from the proposed construction, maintenance, and utilization of recreational facilities. All of the alternatives include common elements such as the compliance of all cultural resource studies in the project area to Section 106 standards as required under the National Historic Preservation Act (NHPA). Beyond this shared feature, the alternatives vary widely in terms of actions designed to mitigate the potential effects of the implementation of individual projects. Alternative 1 and 2 provide the lowest level of proactive management in that they only include the required Section 106 compliance. Alternative 4 also includes Section 106 compliance but calls for the completion of an inventory of documented sites within the project area.

Alternative 3 calls for the most comprehensive and aggressive approach towards further documenting and preserving cultural resources in the project area. Along with the standard Section 106 compliance, Alternative 3 provides for additional survey programs to identify and record previously unidentified prehistoric and historic resources and additional monitoring of the condition of known cultural resources. In addition, this alternative calls for the formulation of a cultural resources management plan to investigate and articulate the most suitable cultural resource management practices for the project area. This combined program of survey and the use of a management plan subject to Section 106 standards would provide for the highest level of protection for recorded and undocumented cultural resources located within the project area.

Section 106 of the NHPA will guide the standards of all cultural resource investigations conducted within the project area. Any proposed undertaking within properties in the project area that incorporate ground-disturbing activities must conduct cultural resource investigations designed to identify and record prehistoric or historic sites, features, and artifacts that could be adversely affected by individual project implementations. Qualified archaeologists will monitor certain ground-disturbing activities, regardless of the findings of the Section 106-compliance studies, to ensure that undocumented surface or subsurface cultural manifestations are not adversely impacted. If previously unknown resources are encountered during project implementation, the potential significance of the resource must be determined and treatment options will be formulated by the archaeologist in consultation with the project area. Reclamation and Department personnel would be responsible for ensuring Section 106 compliance.

Goals and guidelines that describe the desired future condition of the project area require that efforts be made to minimize impacts on cultural resources when future facilities are sited. With proper precautions, proposed facilities could be sited and constructed in a way that would not result in substantial impacts on

existing known and unrecorded resources. In addition, goal RES-H1 and associated guidelines serve as mitigation for impacts on cultural resources.

Impact Criteria (Cultural Resources)

As described in the CEQA Guidelines, substantial alteration or destruction of the integrity, context, or visual continuity of a site, feature, structure, building, cultural landscape, or artifact that would eliminate important examples of major periods of California prehistory or history is considered a significant impact. The Plan has been designed to prevent significant impacts to cultural resources through avoiding an increase in activities and actions that would contribute to alteration or destruction to cultural resources, as noted above. Pursuant to the CEQA criteria listed below, the Plan does not propose activities that would alter, destroy or eliminate resources listed below, including, but not necessarily limited to:

- A prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethnic social group;
- A prehistoric or historic archaeological site determined to be an "important archaeological resource" as defined in the CEQA Guidelines;
- A property that is listed or eligible for listing on the California Register/National Register; or
- any human remains, historic or prehistoric, including those interred outside of marked formal cemeteries.

Transportation

Impact Summary

With implementation of the Plan, impacts on transportation and traffic would be minimized, as goals and guidelines would be in effect to avoid any potential impacts or limit them to a less-than-significant level.

Environmental Evaluation

Implementation of this Plan has the potential to increase visitor use and associated traffic at the project area by providing for the development of additional facilities, uses, and programs at the unit and by increasing signage along SR 33 and SR 152. In addition, visitation is expected to increase due to population growth in the region and the increasing popularity of outdoor recreation (DPR 1998; DOF 2001). Increasing visitor use would result in additional vehicle trips both within and in the vicinity of the project area, thereby contributing to traffic and potential peak use parking shortages within the project area, adding congestion on SR 33 and SR 152, and presenting additional safety hazards associated with recreation area access points along SR 152.

Alternative 1, No Action/No Project Alternative impacts are associated with the lack of major safety and access improvements to handle the future visitors that will use the existing facilities. Visitors will increase even if no new facilities are built as currently, some areas are not used to capacity, based on vehicle counts during certain times, of the year. Increased visitors without necessary improvements could result

in greater safety and LOS[10] impacts than those anticipated for the action alternatives. The proposed project alternatives have the potential to increase traffic along both SR 152 and SR 33, the additional traffic generated by implementation of the Plan would not result in a substantial increase in traffic compared to existing traffic levels in the area. The existing average annual daily trips (AADT) on SR 152 in the project vicinity is 24,000 trips per day, and the existing AADT on SR 33 in the project vicinity is 8,700 trips per day. Table 4-2 below shows the peak daily vehicle trips to the five use areas at the SRA for each month from July of 2002 through June of 2003 and the average of the peak vehicle trips for each area.

The combined average peak daily trips for the SRA use areas is 2,306 auto trips and an additional 198 trips with boat trailers. The combined average peak daily vehicle and trailer trips for the period shown in Table 4-2 is approximately 7.5 percent of the combined AADT for SR 152 and SR 33 in the vicinity of the project area. Even if the number of vehicle trips associated with the unit were to increase by 50 percent, which is much higher than anticipated, the resulting increase in vehicle trips would be less than 4 percent of the existing combined AADT for SR 152 and SR 33 in the vicinity of the unit. In combination with existing peak-hour traffic, this will not result in these highways dropping below acceptable levels of service (LOS C).

When the potential increase in vehicle trips is considered cumulatively, it will contribute to the exceedance of the level of service standards for SR 33 and SR 152 established by Merced County. The level of service at the intersection of SR 152 and SR 33 is currently rated level A/B (Merced County 2000 [Santa Nella Plan]). However, the level of service for both SR 152 and SR 33 is projected to reach LOS C or D by 2015 (Merced County 2000 [Santa Nella Plan]) and LOS E or F in the project vicinity within next 20 years (MCAG 2001). Furthermore, both routes already experience congestion during peak hours. The Merced County General Plan establishes a minimum acceptable LOS C in rural areas of the county. Any addition of project traffic in this area under Alternative 1, 2, 3, or 4, in combination with 2015 or later, cumulative traffic, would result in additional congestion and accelerated degradation of level of service, potentially resulting in a significant impact. Alternatives 3 and 4 would result in the greatest project contribution to cumulative traffic impacts.

[10] The Level of Service (LOS) concept is commonly used to describe the traffic conditions of roadways and intersections by labeling roads and intersections as one of six categories ranging from A (very low traffic volume and virtually no traffic congestion) to F (traffic exceeds capacity, long and frequent congestion and delays).

Table 4-2
Peak Daily Trips by Month

	SAN LUIS CREEK		DINOSAUR POINT		LOS BANOS CREEK		MEDEIROS		BASALT		TOTAL
	Autos	Trailers	Autos	Trailers	Autos	Trailers	Autos	Trailers	Autos	Trailers	
July-02	885	75	140	25	167	20	503	0	554	30	2399
August-02	1010	80	130	40	227	30	304	0	466	42	2329
September-02	1601	80	150	50	153	16	408	0	549	100	3107
October-02	471	27	207	50	147	14	236	0	540	100	1792
November-02	493	40	270	80	84	15	154	0	722	125	1983
December-02	192	25	130	52	65	14	75	0	294	75	922
January-03	209	30	213	45	69	25	102	0	936	70	1699
February-03	372	50	160	75	77	25	132	0	448	125	1464
March-03	560	25	183	30	506	55	224	0	770	125	2478
April-03	2381	26	----	----	203	45	290	0	764	56	1358
May-03	1518	36	651	46	131	65	1654	0	1104	37	5242
June-03	1325	32	201	39	118	29	233	0	592	34	2603
Average Peak Daily Trips:	**918**	**44**	**221**	**48**	**162**	**29**	**360**	**0**	**645**	**77**	**2504**

Source: DPR 2003

In addition to potentially increasing traffic in the vicinity of the project area, Alternatives 3 and 4 may result in parking shortages in some use areas during peak times. New parking facilities proposed are associated with the new campsites so parking overflow would result from day use activities and some of the water-based recreation. Currently, parking shortages are experienced only during peak times and only in certain areas, with some parking never fully utilized. These underused areas could act as overflow parking for certain group events or other peak use days where parking in proximity to certain activities or events would be exceeded. Implementation of the proposed Plan would therefore not cause a significant impact by resulting in inadequate parking in the project area.

Other impacts to traffic and circulation associated with Alternatives 2, 3, and 4 include an increase in the number of vehicles entering and exiting SR 152 at the Dinosaur Point Road, Basalt, and San Luis Creek use areas. The junctions of SR 152 with Dinosaur Point Road, Gonzaga Road, and San Luis Creek Service Road South Loop have been identified by Department staff as hazardous for vehicles turning in both directions and especially across lanes. The issue of safety improvements at Dinosaur Point Road is not defined herein, as a simultaneous Plan for Pacheco State Park is underway and proposes specific transportation improvements to improve safety and traffic flow at that intersection. Visitor use at Dinosaur Point Use Area as well as at San Luis Wildlife Area along with Pacheco State Park will add to the cumulative effect of traffic impacts in this vicinity. Future consultation with Caltrans and the implementation of the types of improvements recommended will serve to address the potential impacts associated with additional visitor use. In the absence of these improvements, new facility development as proposed may be limited.

To address the Medeiros and San Luis Creek use area access points, Alternatives 3 and 4 provide for more aggressive solutions in concert with Caltrans and Regional Transportation Plan (RTP) efforts. Currently, the RTP also proposes widening SR 152 within the planning horizon of this Plan, which would serve to alleviate some of the traffic constraints and provide an opportunity for upgrades such as a full interchange at San Luis Creek Service Road and a safer crossing and blending lanes from Gonzaga Road to Medeiros Use Area, proposed in Alternatives 3 and 4.

All project action alternatives propose safety improvements including extended turning lanes, signage improvements, and other engineering solutions to improve safety at project area access points. Improved signage would improve traffic flow by providing visitors with better direction to project use areas. Alternatives 2 and 3 also propose the closing of the entry from SR 152 to Gonzaga Road and accessing it from SR 33 only. This interchange already exists and would require signage improvements and could require some roadway upgrades to accommodate the additional traffic on Gonzaga Road. This closing would alleviate current safety issues at Basalt Road and SR 152 and would improve traffic flow on the highway in the interim period prior to more major, long-term improvements.

Alternatives 2 and 3 also propose the construction of a service access off I-5 to Los Banos Creek Use Area to assist in emergency and related needs for staff use only. This would alleviate traffic on some of the smaller roads leading to this area and also reduce staff use of SR 152 by having them exit onto I-5 and then proceeding south to the proposed service road. Alternative 4 proposes an internal access road, avoiding SR 152 from Gonzaga Road to Los Banos Creek Use Area that would significantly reduce traffic as it would also be open for visitor use. Overall, Alterative 4 provides for the most aggressive solutions to solve traffic congestion and safety issues. Based on the proposed recreational improvements of all the alternatives and the associated increase in vehicular traffic, Alternative 3 would have the greatest impact on overall transportation-related issues.

Mitigation

Although the Plan would result in impacts on traffic and circulation, proposed improvements to area roads and highways, particularly SR 152, would alleviate these impacts to less than significant. In addition, the extension of turning and acceleration lanes or the construction by Caltrans of an overpass or underpass at the junction of SR 152 and Gonzaga Road as outlined in the Pacheco State Park General Plan would reduce traffic and increase safety at this intersection. Furthermore, although improving signage along SR 152 and at the project area entrance points may attract additional visitors to the project area, it would also improve traffic flow by improving directions to the various use areas.

Traffic on SR 152 currently exceeds capacity during peak hours, and additional development has been approved in the region that would further increase automobile and truck traffic along SR 152. Caltrans through the RTP has included widening of SR 152, which will serve to handle the increase in traffic volumes and maintain the level of service. Overall, increased visitor use associated with this Plan would not substantially increase traffic on SR 152 in relation to existing and projected traffic levels or the overall capacity of the roadway. Finally, improvements recommended under Alternatives 3 and 4 would serve to minimize traffic and congestion along SR 152 and improve overall safety. In the absence of these improvements, new visitor facilities as proposed in the Plan may be limited. Implementation of the transportation components of the Plan would address and offset the anticipated circulation and traffic concerns, reducing potential impacts to less than significant. Plan mitigation measures are outlined in goals OPS-A1 through OPS-A4 and associated guidelines.

Impact Criteria (Transportation)

The transportation analysis utilized criteria from Appendix G of the state CEQA guidelines; these are provided below for reference only, as the Plan has been designed to prevent significant impacts to transportation through avoiding an increase in activities and actions that would contribute to increased or unsafe traffic conditions. Pursuant to the CEQA criteria listed below, the Plan does not propose activities that would:

- Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system;
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Utilities and Public Services

Impact Summary

With implementation of the Plan, impacts on utilities and public services would be minimized, as goals and guidelines would be in effect to avoid any potential impacts or limit them to a less-than-significant level.

Environmental Evaluation

The proposed project alternatives include a number of actions that have the potential to both directly and indirectly affect utilities and public services in the project area and vicinity. Development of the proposed visitor facilities, including a new ranger station and maintenance facilities, staff housing, campsites and day use facilities, a marina, an upgraded campfire center, and a group interpretive shelter, would directly impact project area utilities. Alternatives 1 and 2 would have the lowest level of development of these facilities, while Alternatives 3 and 4 would have higher levels of development. Proposed developments would require additional utility infrastructure and connections, as well as associated service capacity, supply, and maintenance. The potential increase in demand for utilities and related infrastructure poses a potentially significant impact to utilities in the area. Project-level analysis would be required to verify existing capacities and determine the extent of impacts and the effects of each specific development on utility systems in the project area,

Alternative 1, the No Action/No Project Alternative, would not require substantial new utilities or public services but would require upgrades to older, existing utility systems and some new systems to maintain

existing facilities at current standards. Public service requirements would increase over time even without new facilities as visitation will increase. The proposed Plan and preferred alternative may have a positive impact on utilities and public services through incremental upgrades and improvements and continued and strengthened relationships with mutual aid agencies. The development and improvement of recreational facilities and uses under Alternatives 2, 3, and 4 have the potential to indirectly impact project area utilities through increasing visitor use and associated demand on existing water, wastewater, and electric services. Alternatives 3 and 4 would have the greatest increased visitor demand and, therefore, the greatest potential impacts, which may be significant, based on the possible need for new or improved stormwater facilities or new or expanded wastewater treatment facilities. Development of recreational and operational facilities under the proposed Plan therefore has the potential to significantly impact existing utility infrastructure and demand, potentially requiring additional water and wastewater treatment facilities. Overall, development is proposed in and around areas already serviced by utility infrastructure; additional capacity for most utilities may be readily available, and the need for extensive new distribution lines and associated maintenance may be reduced. Providing water service at Medeiros Use Area may require a new distribution system but it would be limited to new facilities proposed in the immediately vicinity and may utilize existing infrastructure along SR 33 to reduce crossing SR 152 and the forebay.

The proposed Plan also has the potential to impact public services at the project area. The anticipated increase in area use and the construction of additional campsites and day use facilities would result in an increased need for patrols, as well as a potential need for increased fire and emergency services. Alternatives 3 and 4 would have the greatest increased visitor demand and, therefore, the greatest potential impacts to these resources. The proposed transportation improvements have the potential to reduce response times by the California Department of Forestry and Fire Protection, volunteer search and rescue teams, and other state and local emergency response agencies. The proposed Plan therefore has the potential to impact law enforcement and fire and emergency services by increasing demand for such services but also provides for more efficient staff use through reduced response times and improved access.

Mitigation

Specific measures to mitigate impacts on utilities and public services cannot be fully developed at the program level; however, goal OPS-U1and associated guidelines and other Plan goals are provided to prevent impacts on utilities and public services. Project-level review of proposed developments will include further analysis of potential impacts on public services and utilities associated with demand, supply, and infrastructure.

Impact Criteria (Utilities and Public Services)

The utilities and public services analysis utilized criteria from Appendix G of the State CEQA Guidelines; these are provided below for reference only, as the Plan has been designed to prevent significant impacts to utilities and public services. Pursuant to the CEQA criteria listed below, the Plan does not propose activities that would:

- Exceed wastewater treatment requirements of the California Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Lack sufficient water supplies available to serve the project from existing entitlements and resources;
- Result in the determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's demand in addition to the provider's existing commitments;
- Result in an increased demand for police protection and fire and emergency services exceeding existing or planned staffing levels;
- Result in response times to calls for police protection and fire and emergency services exceeding existing levels or established performance standards;
- Substantially increase demand for neighborhood parks, regional parks, or recreational facilities that would accelerate their physical deterioration, or decrease the quality of facilities or users' experience; or
- Result in the removal of a neighborhood park or open space area.

Scenic/Aesthetics

Impact Summary

With implementation of the Plan, impacts on aesthetics would be minimized, as goals and guidelines would be in effect to avoid any potential impacts or limit them to a less-than-significant level.

Environmental Evaluation

The proposed Plan includes the development of additional visitor facilities including day-use, camping, shoreline and water surface facilities, maintenance, and staff facilities in the project area. The additional development of current use areas has the potential to adversely affect the project area's existing scenic quality and character by reducing scenic vistas and open landscape character or damaging scenic resources. In addition, new facilities have the potential to create new sources of light or glare, which could affect day or nighttime views in the area. The proposed Plan therefore has the potential to adversely affect aesthetics and scenic resources within the project area. Alternative 1, the No Action/No Project Alternative can impact scenic and aesthetic resources due to the lack of a comprehensive visual assessment of these resources allowing incremental future improvements to take place without a full understanding of these resources. The Plan will provide a framework for managing and developing future facilities and improving existing facilities with regards for scenic and aesthetic resources.

Mitigation

The proposed Plan specifies that intrusion on aesthetics is to be minimized by limiting development within scenic view sheds. Moreover, the majority of the development in the project area would be in the FC and AO zones, which currently hold the majority of the developed facilities. The potential for proposed facilities to intrude on undeveloped areas is least in these areas, and development in these areas would be out of the majority of the project area's scenic vistas. Implementation of the proposed scenic view shed protection, and the design of proposed facilities to incorporate styles, features, materials, and architectural mass appropriate to the project area's scenic character, would reduce the potential for impacts on

aesthetics and visual resources. Specific mitigation measures are outlined in goals RES-S1 through RES-S5 and their associated guidelines.

Impact Criteria (Scenic/Aesthetics)

The aesthetics analysis utilized criteria from Appendix G of the State CEQA Guidelines; these are provided below for reference only, as the Plan has been designed to prevent significant impacts to scenic and aesthetic resources through avoiding development in a scenic vista, damaging scenic resources or degrading the visual character of the project area. Pursuant to the CEQA criteria listed below, the Plan does not propose activities that would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Table 4-3
Summary of Environmental Consequences

RESOURCES	ALTERNATIVE 1: NO ACTION/NO PROJECT	ALTERNATIVE 2: LIMITED NEW ACCESS/FACILITIES AND RESOURCE MANAGEMENT	ALTERNATIVE 3: PREFERRED ALTERNATIVE - LONG-RANGE DEVELOPMENT/HABITAT PROTECTION	ALTERNATIVE 4: MAXIMUM NEW ACCESS/ MODERATE DEVELOPMENT
Hydrology/Floodplain	Continuation of existing water quality impacts from motor vehicles and reservoir use. No new construction-generated sedimentation. No development in floodplains.	Water quality impacts from motor vehicles, SRA use, and construction-generated sedimentation would be mitigated to less than significant by state and federal requirements and Plan goals (RES-WQ1-4) and guidelines. No development in floodplains. Minor increase in water demand from new development.	Water quality impacts from motor vehicles, SRA use, and construction-generated sedimentation (greater than Alt. 2) would be mitigated to less than significant by state and federal requirements and Plan goals (RES-WQ1-4) and guidelines. No development in floodplains. Moderate increase in water demand from new development.	Water quality impacts from motor vehicles, SRA use, and construction-generated sedimentation greater than Alternatives 2 or 3. Impacts would be mitigated to less than significant by state and federal requirements and Plan goals (RES-WQ1-4) and guidelines. No development in floodplains. Moderate increase in water demand from new development.
Air Quality	Continuation of existing vehicular emissions. No new construction emissions.	Minor additional vehicular and construction emissions from increased facilities and use; no change in OHV emissions (less than Alternatives 3 or 4). Consistent with AQMP.	Minor additional vehicular and construction emissions from increased facilities and use; no change in OHV emissions. Consistent with AQMP.	Minor additional vehicular and construction emissions from increased facilities, use and expansion of OHV Use Area (greater than Alternatives 2 or 3). Consistent with AQMP.
Noise	Continuation of existing vehicular noises. No new or expanded vehicular or construction noise.	Increased vehicular and construction noise from facility use and expansion. Minor new backcountry noise. No change in OHV Use Area noise.	Increased vehicular and construction noise from facility use and expansion. Minor new backcountry noise from new trails. No change in OHV Use Area noise.	Increased vehicular and construction noise from facility use and expansion. Potentially significant new backcountry noise from new connector road and expansion of OHV Use Area.

Table 4-3
Summary of Environmental Consequences

RESOURCES	ALTERNATIVE 1: NO ACTION/NO PROJECT	ALTERNATIVE 2: LIMITED NEW ACCESS/FACILITIES AND RESOURCE MANAGEMENT	ALTERNATIVE 3: PREFERRED ALTERNATIVE - LONG-RANGE DEVELOPMENT/HABITAT PROTECTION	ALTERNATIVE 4: MAXIMUM NEW ACCESS/ MODERATE DEVELOPMENT
		Impacts mitigated to less than significant by EIS/EIR mitigation.	Impacts mitigated to less than significant by EIS/EIR mitigation.	Impacts mitigated to less than significant by EIS/EIR mitigation.
Biological Resources	No new impacts to vegetation resources.	Minor potential loss of wetlands, sensitive vegetation (including special-status plants), and habitat fragmentation from new/expanded facilities and use. Impacts mitigated to less than significant by Plan goals (RES-V1-5) and guidelines.	Moderate potential loss of wetlands, sensitive vegetation (including special-status plants), and habitat fragmentation from new/expanded facilities and existing and new use. Impacts mitigated to less than significant by Plan goals (RES-V1-5) and guidelines.	Moderate potential loss of wetlands, sensitive vegetation (including special-status plants), and habitat fragmentation from new/expanded facilities and use. Potential increase in habitat fragmentation and degradation from expansion of OHV Use Area and new connector road and trail. Impacts mitigated to less than significant by Plan goals (RES-V1-5) and guidelines.
Wildlife	No new impacts to wildlife resources. No protection of resources from RMP.	Potentially significant potential for impacts on special status wildlife species in/near existing facilities are mitigated to less than significant by Plan goals (RES-V1-5) and guidelines.	Potentially significant, potential for impacts on special status wildlife species in/near existing facilities area, including San Joaquin kit fox, Swainson's hawk, burrowing owl, and tricolored blackbird mitigated to less than significant by Plan goals (RES-V1-5) and guidelines.	Potentially significant, potential for impacts on special status wildlife species in/near existing facilities area, including San Joaquin kit fox, Swainson's hawk, burrowing owl, and tricolored blackbird mitigated to less than significant by Plan goals (RES-V1-5) and guidelines. Plan would cooperate with Merced County HCP. Impacts to sensitive species in existing

Table 4-3
Summary of Environmental Consequences

RESOURCES	ALTERNATIVE 1: NO ACTION/NO PROJECT	ALTERNATIVE 2: LIMITED NEW ACCESS/FACILITIES AND RESOURCE MANAGEMENT	ALTERNATIVE 3: PREFERRED ALTERNATIVE - LONG-RANGE DEVELOPMENT/HABITAT PROTECTION	ALTERNATIVE 4: MAXIMUM NEW ACCESS/ MODERATE DEVELOPMENT
				and expanded OHV Use Area and from proposed new connector road and trail would be increased, including possible direct take and habitat fragmentation.
Cultural Resources	Moderate potential for impacts of continued area use on known and unknown cultural resources. No impacts from construction of new facilities.	Moderate potential for impacts of expanded use and new facilities on known and unknown cultural resources, particularly those near existing developed use areas. Overall less impact than Alternatives 3 and 4. Impacts would be reduced to less than significant levels by Plan goal (RES-H1) and guidelines.	Significant potential for impacts of expanded use and new facilities on known and unknown cultural resources near existing and proposed new use areas as well as near new trails. Overall less impact than Alternatives 4 but greater impact than Alternative 3. Impacts would be reduced to less than significant levels by Plan goal (RES-H1) and guidelines.	Significant potential for impacts of expanded use and new facilities on known and unknown cultural resources near existing and proposed new use areas as well as along proposed new roads and expanded OHV Use Area. Greater potential impact than Alternatives 2 and 3. Impacts would be reduced to less than significant levels by Plan goal (RES-H1) and guidelines. .
Transportation	Gradual increase in traffic impacts as facility use increases. No roadway or signage improvements; no increase in traffic from new facilities/uses.	Minor increases in traffic along SR 33 and SR 152, as well as on project access roads from new uses and facilities. Turning-lane improvements from SR 152 and SR 33, and closure of Basalt Use Area access from SR152 would improve safety. Alternative 2 would contribute slightly to cumulatively significant future traffic congestion on SR 152.	Minor increases in traffic along SR 33 and SR 152, as well as on project access roads from new uses and facilities. Turning-lane improvements from SR 152 and SR 33, improved access signage, improved interchange at San Luis Creek entry road, new crossing from Gonzaga Road to Medeiros use area, and closure of Basalt Use Area access from SR152 would improve safety.	Minor increases in traffic along SR 33 and SR 152, as well as on project access roads from new uses and facilities. Turning-lane improvements from SR 152 and SR 33, improved interchange at San Luis Creek entry road, and new crossing from Gonzaga Road to Medeiros Use Area would improve safety.

Table 4-3
Summary of Environmental Consequences

RESOURCES	ALTERNATIVE 1: NO ACTION/NO PROJECT	ALTERNATIVE 2: LIMITED NEW ACCESS/FACILITIES AND RESOURCE MANAGEMENT	ALTERNATIVE 3: PREFERRED ALTERNATIVE - LONG-RANGE DEVELOPMENT/HABITAT PROTECTION	ALTERNATIVE 4: MAXIMUM NEW ACCESS/ MODERATE DEVELOPMENT
			Alternative 3 would contribute slightly (but greater than Alternatives 2 and 4) to cumulative future traffic congestion on SR 152. Potential parking shortages during peak use periods. Adequate internal circulation.	Alternative 4 may slightly reduce cumulative future traffic congestion on SR 152 due to creation of an internal access road. Potential parking shortages during peak use periods. Adequate internal circulation.
Utilities and Public Services	There would be no new development under this alternative, and utility and service demand and improvements would gradually increase with project area use.	Alternative 2 would have lower new development of facilities and use than Alternatives 3 and 4, and includes upgrades of utilities if failing. Services would be upgraded as necessary. Therefore any potential significant impacts would be mitigated by the Plan goal (OPS-U1) and guidelines.	Alternative 3 would have greater new development and use of facilities than Alternatives 2 and 4, and includes upgrades of utilities as necessary to meet current standards. Services would be upgraded as necessary. Therefore any potential significant impacts would be mitigated by the Plan goal (OPS-U1) and guidelines.	Alternative 4 would have greater new development and use of facilities than Alternative 2 but less than Alternative 3, and includes upgrades of utilities as necessary to meet current standards. Services would be upgraded as necessary. Therefore any potential significant impacts would be mitigated by the Plan goal (OPS-U1) and guidelines.

Mitigation Measures Common to All Action alternatives

To ensure that implementation of the proposed action protects natural, cultural, and social resources, in addition to the goals and guidelines, the following is a consistent set of mitigation measures that would be considered and applied as necessary, during project implementation and construction to avoid, minimize, and mitigate adverse impacts.

Resource-Specific Mitigation Measures

Hydrology and Water Quality

- Develop and implement a stormwater pollution prevention plan to control erosion and sedimentation, both during and after construction, thereby reducing water pollution.
- Place construction debris in refuse containers at least daily.
- Dispose of refuse at least weekly. Do not burn or bury refuse inside the project area.
- Schedule construction activities, particularly those resulting in substantial soil disturbance, during periods of low precipitation and low groundwater, when feasible, to reduce the risk of accidental hydrocarbon leaks or spills reaching surface and/or groundwater, to reduce the potential for soil contamination, and to minimize erosion of loose materials in construction areas.
- Dispose of volatile wastes and oils in approved containers for removal from construction sites to avoid contamination of soils, drainages, and watercourses.
- Inspect equipment for hydraulic and oil leaks prior to use on construction sites, and implement inspection schedules to prevent contamination of soil and water.
- When using heavy equipment, keep absorbent pads, booms, and other materials on-site, so as to contain oil, hydraulic fluid, and solvents.
- Incorporate methods for minimizing flood damage into the design of all new structures, as contained in the National Flood Insurance Management.

Air Quality

- Design site layout and development so as to minimize the number of vehicle trips in the project area, thereby reducing vehicle-related emissions. In addition, minimize construction-related vehicle trips through carpooling and elimination of unnecessary trips during project construction.
- Use best-available technology in all furnaces, boilers, engines, and other lodging- and visitor-related air pollutant sources associated with new buildings and facilities.

Noise

- Implement standard noise abatement measures, such as developing a construction schedule that minimizes impacts to adjacent noise-sensitive uses; using best-available noise control techniques wherever feasible; using hydraulically or electrically powered impact tools when feasible; locating stationary noise sources as far from sensitive uses as possible; erecting temporary noise barriers between construction areas and lodging units, or temporarily vacating lodging units located adjacent to construction areas.

- Consider privacy and noise screening in the design and layout of new and relocated campsites and lodging.
- Apply noise-reducing technology to vehicles and equipment associated with the project and construction activities where possible.

Biological Resources

Wetlands

- Site new facilities to avoid wetlands whenever practicable.
- Use fencing to delineate wetlands within and adjacent to construction areas that would not be directly filled and mark the areas as sensitive habitat prior to the start of construction to prevent unintended trampling of wetland vegetation by construction personnel and equipment.
- Water pumped out of excavation areas should be released at least 100 feet from wetland areas and allowed to flow over vegetated areas to filter runoff. Plant native shrubs and groundcover along the drainages to reduce sedimentation.
- Construct bridges and install culverts when there is no water in the watercourses. Revegetate disturbed areas, as appropriate, and minimize erosion.

A biologist will review the final wetland delineation to assist the design team in avoiding impacts to wetlands to the extent feasible. Any unavoidable impacts will be mitigated by replacement of the wetlands through restoration.

Special-Status Species

The USFWS is responsible for administering conservation and recovery measures to protect federally listed species, as directed in the Endangered Species Act of 1973. DFG has jurisdiction over state-listed and fully protected species as well as avoidance measures specific to these specieis. Under several regulations, the Department is required to coordinate with USFWS, DFG or NOAA Fisheries if impacts to special status species (See Chapter 2) are expected. A qualified biologist will be available to inspect all excavations before refilling occurs, ensuring that special-status species are passively relocated to avoid incidental take.

- Birds – Trees, structures, and understory that contain unoccupied nests must be removed prior to March 1, or after the nesting season is over. If project activities occur during the breeding season, preconstruction surveys will be conducted for special-status birds within 500 feet of new development. If construction could affect an active nest, construction will be delayed until a qualified biologist determines that adults are no longer caring for young and that juvenile birds are no longer roosting at the nest. Surveys for special-status birds will likely occur prior to initiating most project activities, given the prevalence of trees and buildings that have the potential to support nesting activities.
- Amphibians – Work within suitable aquatic habitat will be completed between July 1 and November 1 or during low-flow conditions. A qualified biologist will survey the site two weeks prior to the onset of activities to determine if any lifestage of special-status amphibians is present. The appropriate agency would be contacted if any lifestage is found and may need to be relocated. Preconstruction

surveys for special-status amphibians should be conducted within upland and wetland habitat, 500 feet from suitable aquatic breeding sites.

- Plants – Preconstruction surveys will be conducted for special-status plants by a qualified botanist in areas of suitable habitat within 300 feet of construction areas. If special-status species are identified in areas not directly affected by construction, those populations will be fenced and marked to protect them from trampling by construction equipment or personnel.

Vegetation

- Develop revegetation plans for any disturbed area, requiring the use of native species from the same gene pool. Specify soil preparation, native seed/plant mixes, and mulching for all areas disturbed by construction activities.
- Develop and implement a monitoring plan to ensure successful revegetation, maintain plantings, and replace unsuccessful plant materials.
- Salvage vegetation to the extent possible for use in revegetating disturbed areas.
- Enforce construction specifications regarding soil salvage and reuse, trenching, plant protection, and finished grading.
- Select base course and fill materials for compatibility with native soils to minimize the risk of introducing non-native plant seeds. Monitor areas where fill is imported from outside the project area, and eradicate non-native plants. Apply standard techniques to prevent non-native plant encroachment.
- Develop monitoring and mitigation plans for managing non-native plants within and immediately surrounding construction and developed areas.
- Confine all construction operations to specified project work limits. Install temporary barriers to protect natural surroundings (including trees, plants, and root zones) from damage. Repair or replace damaged trees and plants.
- Install fencing to minimize use of highly sensitive sites such as riparian and wetland habitat, and install signs as needed to direct use to more appropriate areas. Placement of fencing and signs would be developed in consultation with cultural resources and natural resources staff.
- Use native or seed-free mulch to minimize surface erosion and introduction of non-native plants.

Wildlife

- Limit the effects of light and noise on adjacent habitat through control of sources during construction, and through site design of facilities, to limit long-term effects of development.
- Install fencing and signs to direct visitor use away from sensitive habitats.
- Maintain routes of escape from excavated pits and trenches for animals that might fall in. Cover post holes and other narrow pits and trenches with boards. During construction, maintain vigilance for animals caught in excavations and take appropriate actions to free them.
- Provide procedures to limit the chance of pollution spills, both during construction and during subsequent use of completed facilities. This is especially important where activities are near aquatic or wetland habitats.
- To the extent practicable, site and design facilities to minimize objectionable noise.

- Remove any trees or structures containing unoccupied nests (stick nests or tree cavities) prior to March 1, or after the nesting season is over. Also remove unoccupied nests where they occur in trees that are not to be removed, but that are within areas expected to be subjected to disturbance during the breeding season.
- Should construction activities take place during the breeding season, a qualified biologist would conduct a preconstruction survey for known special status species, no more than one week prior to construction in March through August. If it is determined that construction would affect an active nest or disrupt reproductive behavior, then avoidance strategies would be implemented. Construction could be delayed within 500 feet of such a nest, until a qualified biologist determines that the subject birds are no longer nesting or until any juvenile birds are no longer using the nest as their primary day and night roost.

Transportation Planning

- As part of the construction management plan, develop a traffic and pathways diversion and circulation plan to reduce disruption to traffic flow and to protect sensitive resources. This plan will be reviewed by project area resources, operations, and visitor safety staff prior to approval.

Utilities

- Verify existing utility locations through field survey (potholing) and/or use the Underground Services Alert services prior to the start of construction.
- Observe California Department of Health Services standards that require: 1) a 10-foot horizontal separation between parallel sewer and water mains; 2) 1-foot vertical separation between perpendicular water and sewer line crossings; and 3) encasement of water mains in protective sleeves where a new sewer force main crosses under or over an existing sewer main.
- Observe guidelines specified in the International Plumbing Code, Building Officials and Code Administration National Plumbing Code, National Electric Code, and the National Fire Protection Code regarding utilities installation and/or abandonment of pipelines.
- Maintain and use existing utilities infrastructure and facilities, where possible, in order to minimize impacts from construction of additional facilities.
- Avoid trees and existing buildings and facilities that would be impacted during construction of additional utilities infrastructure and facilities, to the degree possible.
- Promptly reconnect utility services that are unexpectedly interrupted due to construction activities. In addition, provide advanced notification to residents, concessionaires, and others in the event that utility services will be disrupted.

Construction Mitigation Measures

The following Best Management Practices (BMP) and mitigation measures would be implemented as appropriate, prior to, during, and/or after construction.

- Preconstruction briefings will be required to educate construction crews on the measures required to protect natural and cultural resources.

- Construction area boundaries, including staging areas, will be clearly marked to ensure that construction activities do not affect resources outside of the construction areas. All construction activity and storage of construction materials will occur within these marked areas. Construction and staging areas will be confined to the smallest area necessary.
- Natural resources will be protected through biological monitoring, erosion and sediment control, use of fencing or other means to protect sensitive resources adjacent to construction, topsoil salvage, and revegetation. Fencing will be used to mark the limits of allowed construction disturbance and to mark specific vegetation to be salvaged or preserved.
- Cultural resources will be protected by minimizing the areas to be disturbed, providing clear definition for staging areas away from resources, using fencing to protect sensitive resources adjacent to construction areas, and performing construction monitoring in appropriate areas.
- Compliance monitoring will be implemented to ensure the project remains within the parameters of the National Environmental Policy Act and National Historic Preservation Act compliance requirements, USACE Section 404 permits, and other permits and regulations. Compliance monitoring will ensure adherence to mitigation measures and will include reporting protocols.
- Water quality will be protected through the use of silt fences, sedimentation basins, and other control measures to reduce erosion, surface scouring, and discharge to water bodies. Excavated material will be stored in upland areas and stabilized to prevent discharge into water bodies or wetlands.
- Wetland areas will be delineated and marked. Adjacent or nearby wetland areas not in the construction area will be fenced to reduce potential impacts from construction activities.
- In accordance with the invasive species removal program set forth in the goals and guidelines, construction equipment will be steam-cleaned and inspected to ensure that it arrives on site free of mud and seed-bearing material; seeds and straw material shall be certified as weed-free; and areas of noxious weeds will be identified and treated prior to construction. Areas treated to remove noxious weeds will be revegetated with appropriate native species.
- A dust abatement program will be implemented during construction. Clearing of vegetation will be minimized to the greatest extent possible. Water will be applied to reduce dust during construction; trucks hauling soil will be required to cover the soils during transport; and disturbed areas will be revegetated with native species after construction. Excavated soils will be stockpiled and covered.
- A spill prevention and pollution control program for hazardous materials will be implemented. The program will emphasize proper hazardous materials storage and handling procedures; will outline spill containment, cleanup, and reporting procedures; and will limit refueling and other hazardous activities to designated upland areas. Signs prohibiting refueling will be posted in sensitive areas. Equipment will be inspected prior to use each day to ensure that hydraulic hoses are tight and in good condition.
- When applicable, a traffic control plan will be implemented to ensure that safe and efficient traffic and pedestrian flow is maintained during construction.
- Signage will be provided at the entry stations, along the roadways, and at critical intersections noting where construction activities are taking place.
- A visitor communication and protection plan will be developed to ensure that visitors are safely and efficiently routed around construction in the project area. This plan will include means for communicating construction and closure schedules to the public, adequate barriers to keep visitors clear of active construction areas, and clear signage to direct visitors to open project area destinations during construction. Interpretation for visitors of the activities, the value and effects of ongoing construction projects shall be included.

- A revegetation plan will be developed to ensure that salvage vegetation is used where possible and that native species are used. Monitoring will occur during the revegetation period to ensure the success of the revegetation plan.
- All tools, equipment, barricades, signs, surplus materials, and rubbish will be removed from the project area upon project completion and revegetation of disturbed areas. The Reclamation or Department project manager will make inspections to ensure that impacts remain within the parameters of the project and do not escalate beyond the scope of the EIS/EIR, as well as to ensure that the project conforms to the USACE Section 404 permits.
- Disturbed or developed areas will be used for staging whenever possible. Staging areas for individual projects will be identified during final design and will require approval by the project manager.
- An emergency notification program will be established. Standard measures include notification of utilities and emergency response units prior to construction activities. Locations of existing utilities will be identified prior to construction activity to prevent damage to utilities, particularly the water supply lines that pass through the work limits. The contractor will call Underground Services Alert and Department maintenance staff 72 hours prior to any ground disturbance. Construction will not proceed until the process of locating existing utilities is completed.
- Damage to natural surroundings in and around the work limits will be avoided. Temporary barriers to protect existing trees, plants, and root zone will be provided, if necessary. Trees and other vegetation will not be removed, injured, or destroyed without prior written approval. Ropes, cables, or fencing will not be fastened to trees. All existing resource protection fencing (post and rope) will be left in place and protected from heavy equipment.

NEPA/CEQA Environmentally Preferable/Superior Alternative

The National Environmental Policy Act (CEQ's 40 Most Asked Questions, 6(a) and 6(b)), as well as Reclamation's National Environmental Policy Act Handbook (Bureau of Reclamation 2000, Section 8.6.5) requires that "the alternative or alternatives which were considered to be environmentally preferable" be identified. Environmentally preferable is defined as "the alternative that will promote the national environmental policy as expressed in Section 101 of the National Environmental Policy Act, meaning the alternative that causes the least damage to the biological and physical environment. In addition, it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources" (Council on Environmental Quality 1981). Although Council on Environmental Quality regulations require the identification of the environmentally preferred alternative, it is not required that this alternative be adopted.

Section101 of the NEPA states that "… it is the continuing responsibility of the Federal Government to (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (2) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; (4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice; (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources."

The California Environmental Quality Act Guidelines (Section 15126.6(a) and (e)(2)) require that an EIR's analysis of alternatives identify the "environmentally superior alternative" among all of those considered. In addition, if the No Project Alternative is identified as environmentally superior alternative, then the EIR must also identify the environmentally superior alternative among the other alternatives. Under CEQA, the goal of identifying the environmentally superior alternative is to assist decision-makers in considering project approval. CEQA does not require an agency to select the environmentally superior alternative (CEQA Guidelines Section 15042-15043).

Alternative 1, the No Action/No Project Alternative, would result in the least development but would not implement any resource management plans. This alternative would not result in any new impacts, but existing impacts would continue. Alternative 2 would have minimal new development. The development under Alternative 2 would be centered on existing developed areas, and this alternative would not open new areas up to vehicular access. Alternative 2 also would include the development of limited resource management plans for biological resources, and limited analysis of cultural resources. Alternative 3 would have the greatest long range facility development concentrated and clustered in existing developed areas. It would have comprehensive resource management plans and actions for biological and cultural resources. Alternative 3 would also minimize encroachment into surrounding undeveloped lands with access roads and trails. Alternative 4 would have a moderate to high level development and would introduce new roadways into currently undeveloped areas and would expand the use of OHV's. Alternative 4 would have resource management plans for biological resources and would include participation in the Merced County HCP.

Alternative 1, No Action/No Project, would have the lowest level of development impacts but would not ensure future protection of biological and cultural resources due to its lack of resource management plans and other plan policies. Alternative 3 would be the Environmentally Preferred/Environmentally Superior Alternative because it would comply with Section 101 of the NEPA and minimize potential effects to biological resources, public services, utilities, water quality, traffic, noise, and cultural resources compared with the other action alternatives, and it would include resource management plans and plan policies to protect all resources of the area.

Unavoidable Adverse Impacts

Evaluation at the specificity of this first tier review indicates that the potential impacts from projects proposed in this Plan, given the current baseline, can be mitigated to a less-than-significant level through appropriate facility siting, the implementation of resource management programs, use of best management practices, and development of other specific mitigation measures.

Until the uses, locations, and scope of facilities or management plans are specified, the actual level of impact, whether individual or cumulative, cannot be determined. However, all plans and projects are required to be in compliance with local, state, and federal permitting and regulatory requirements and are subject to subsequent tier NEPA and CEQA review and project-specific mitigation.

Significant Irreversible and Irretrievable Commitment of Resources and Environmental Impacts

No significant irreversible changes to the natural environment are anticipated from the adoption and implementation of this Plan. While any facilities development, including structures, roads, and trails, may

be considered a long-term commitment of resources, impacts can be reversed through removal of facilities and discontinued use. In areas where impacts have become unacceptable either from excessive use or from a change in environmental conditions, the Department removes, replaces, or realigns facilities, such as trails and campsites, or closes areas on a seasonal or temporary basis until conditions can improve. The construction and operation of facilities may require the use of nonrenewable resources. This impact would be minor due to the limited number of facilities planned for development and to the consideration of sustainable practices in site design, construction, maintenance, and operations as proposed in the Plan. Sustainable principles used in design and management emphasize environmental sensitivity in construction, the use of nontoxic materials and renewable resources, resource conservation, recycling, and energy efficiency. Many cultural resources are considered unique and nonrenewable. Destruction of any significant cultural resource may be considered a significant irreversible effect. To avoid this impact, proposed development sites will be surveyed for cultural resources, all site and facilities designs will incorporate methods for protecting and preserving significant cultural resources, and human activities will be monitored to protect cultural resources.

No significant irreversible changes to the physical environment are anticipated from the adoption and implementation of this Plan. Facility development, including structures, campsites, trails, and roads, may be considered a long-term commitment of resources; however, the impacts can be reversed through removal of the facilities and discontinuation of access and use. The Department and Reclamation do remove, replace, or realign facilities, such as trails and campsites, where impacts have become unacceptable either from excessive use or from a change in environmental conditions.

The construction and operation of facilities may require the use of nonrenewable resources. This impact is projected to be minor due to the limited amount of facilities and infrastructure planned for development and the consideration of sustainable practices in site design, construction, maintenance, and operations, as proposed in the Plan. Sustainable principles used in design and management emphasize environmental sensitivity in construction, the use of nontoxic materials and renewable resources, resource conservation, recycling, and energy efficiency.

In addition, many cultural resources are considered unique and nonrenewable. Accordingly, destruction of any significant cultural resource may be considered a significant irreversible impact. To avoid such impacts, proposed development sites will be surveyed for cultural resources; all sites and facility designs will incorporate methods for protecting and preserving significant cultural resources; and human activities will be monitored to ensure protection of cultural resources.

The loss of special-status plants and animals also could be a significant irreversible impact. To avoid such impacts, proposed development sites will be surveyed for biological resources; all sites and facility designs will incorporate methods for protecting and preserving significant biological resources; and human activities will be monitored to ensure protection of biological resources.

Growth-Inducing Impacts

An EIR must discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment (State CEQA Guidelines §15126.2(d)). Projects that would remove obstacles to population growth, such as an expansion of a wastewater treatment plant, are also considered when discussing

growth inducement. Increases in population may also tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

Implementation of the Plan would likely result in an increase in visitation to the project area. The Plan recommends new visitor facilities thereby increasing its capacity for visitors. Providing increased awareness to the project area through improved signage and other infrastructure improvements will attract more visitors to the project area. Improving trail connections between the project area and adjacent and nearby public lands may contribute to the potential for increased overnight use in areas of the project area that currently lack these opportunities.

The increased capacity may result in the need for an increased number of permanent and seasonal staff. The Plan also recommends consideration of additional seasonal staff housing and improvements to existing staff housing. These proposals would result in a very minimal direct population growth impact on the area. Improvements to the project area's utilities including future water supply and sanitary systems will be self-contained for project area-use only and would not encourage population growth in the surrounding area.

Increased visitation to the project area may create additional tourism and the need for tourist services in the adjacent communities and surrounding region. The Plan could potentially foster economic growth in the region by encouraging an increase in supporting recreation and tourist services, such as recreation equipment, supplies, food, and related facilities.

Although population growth in the state and region will continue to create an increased use and demand for recreational opportunities at the project area, these will not have permanent, irreversible impacts in the region.

Cumulative Impacts

"Cumulative impacts" refers to two or more individual effects that may be significant when considered together, or that compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact of several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines §15355).

Merced County is experiencing tremendous population growth. New development is planned in Santa Nella, Los Banos, and Gustine and on many of the surrounding ranch properties near the project area. This development includes residential subdivisions and commercial uses, as well as the expansion of government buildings and learning institutions. To the extent that the loss of biological, cultural, and visual resources is occurring in the region, any loss, disturbance, or degradation of these resources would contribute to cumulative impacts. As described above, development of the Plan through Alternatives 2, 3, or 4 contributes to cumulatively significant traffic impacts on SR 152. The Plan proposes a number of mitigation measures to avoid or minimize impacts on these resources. In addition, the protection of large expanses of unfragmented open space and protection of wildlife habitat and corridors will further reduce the cumulative effects that the Plan would contribute to the region.

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6. Glossary of Terms and Aconymns

6. Glossary of Terms

Aesthetics: The visual, audible, and other sensory factors within the project area setting and its surrounding landscapes that, taken together, establish character or sense of place.

Active fault: A fault that has moved recently and which is likely to move again. For planning purposes, an "active fault" is usually defined as one that shows movement within the last 11,000 years and can be expected to move within the next 100 years.

Ambient air quality: The atmospheric concentration (amount in specified volume of air) of a specific compound as actually experienced at a particular geographic location that may be some distance from the source of the relevant pollutant emissions.

Ambient noise level: The composite of noise from all sources near and far.

Archaeological: Pertaining to the material remains of past human life, culture, or activities.

Best Available Control Technology (BACT): The most stringent emission limit or control technique that has been achieved in practice that is applicable to a particular emission source.

Best Management Practices (BMP): The most current methods, treatments, or actions in regard to environmental mitigation responses.

Biodiversity: Biological diversity in an environment as indicated by numbers of different species of plants and animals, as well as the relative abundance of all the species within a given area.

Buffer: Land that protects natural and/or cultural values of a resource or park from adverse effects arising outside the buffer.

California State Parks and Recreation Commission: A commission established in 1927 to advise the Director of the California Department of Parks and Recreation on the recreational needs of the people of California. In 1928 it gathered support for the first State Park bond issue. The commission schedules public hearings to consider classification or reclassification and the approval of the Department's general plan (and amendments) for each park.

California Environmental Quality Act (CEQA): A state law (PRC §21000 et seq.) requiring state and local agencies to take actions on projects with consideration for environmental protection. If a proposed activity may result in a significant adverse effect on the environment, an EIR must be prepared. General plans require a "program EIR" and park development projects require a project environmental document.

Clean Water Act: A law enacted in 1972 to create a basic framework for current programs to control water pollution; provides statutory authority for the National Pollutant Discharge Elimination System (NPDES).

Concession: A contract with persons, corporations, partnerships, or associations for the provision of products, facilities, programs, and management and visitor services that will provide for the enhancement

of park visitor use, enjoyment, safety, and convenience. Concession developments, programs, and services must be compatible with a park's classification and general plan provisions.

Conservation easement: Acquisition of rights and interests to a property to protect identified conservation or resource values using a reserved interest deed. Easements may apply to entire parcels of land or to specific parts of the property. Most are permanent, although term easements pose restrictions for a limited number of years. Land protected by a conservation easement remains on the tax rolls and is privately owned and managed; landowners who donate conservation easements are generally entitled to tax benefits.

Cultural landscape: A geographic area (including both the cultural and natural resources) associated with a historic event, activity, or person or exhibiting cultural or aesthetic values. This type is a landscape that evolved through use by people whose activities or occupancy shaped it.

Cultural resource: A resource that exists because of human activities. Cultural resources can be prehistoric (dating from before European settlement) or historic (post-European contact).

Cumulative impact: As defined by the State CEQA Guidelines (§15355), two or more individual effects that are considerable when considered together, or that compound or increase other environmental impacts.

Degradation: The reduction of environmental quality in an area through a lessening of diversity, the creation of growth anomalies, or the supplanting of native species by non-native plant and animal species.

Demographic: Having to do with a particular characteristic of a segment of the public at large; may be connected to the group's age, the region where the group resides, a particular recreational interest, economic status, etc.

Effect/impact: An environmental change; as defined by State CEQA Guidelines §15358: (1) Direct or primary effects are caused by the project and occur at the same time and place; (2) Indirect or secondary effects are caused by the project and are late in time or farther removed in distance, but still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water quality and other natural systems, including ecosystems.

Endangered species: A species of animal or plant whose prospects for survival and reproduction are in immediate jeopardy from one or more causes. The U.S. Fish and Wildlife Service and/or the California Department of Fish and Game make this designation.

Environment: As defined in State CEQA Guidelines §15360, "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historical and aesthetic significance."

Environmental impact report (EIR): A report required by CEQA that assesses all the environmental characteristics of an area and determines what effects of impacts will result if the area is altered or disturbed by a proposed action. If a proposed activity may result in a significant adverse effect on the

environment, an EIR must be prepared. General plans require the preparation of a "program" EIR appropriate to its level of specificity.

Environmentally sensitive: An area in which plant or animal life or their habitats are either rare or especially valuable because of their role in an ecosystem. Such areas can be easily disturbed or degraded by human activities and developments.

Exotic species: A species occurring in an area outside of its historically known natural range that has been intentionally introduced to or has inadvertently infiltrated into the system. Also known as non-native, ornamental, or introduced species. Exotic animals prey upon native species and compete with them for food and habitat. Exotic plant species can convert native ecosystems into a non-native dominated system that provides little benefit to other species in the ecosystem.

Floodplain: A lowland or relatively flat area adjoining inland or coastal waters that is subject to a one or greater chance of flooding in any given year (i.e., 100-year flood).

Geology: The scientific study of the origin, history, and structure of the earth.

General Plan: A legal planning document that provides guidelines for the development, management, and operation of a unit of the State Park system. A general plan evaluates and defines land uses, resource management, facilities, interpretation, concessions, and operations of a park and addresses environmental impacts in a programmatic manner. A park must have an approved general plan before any major development project is implemented.

Grade: The degree of rise or descent of a sloping surface.

Habitat: The physical location or type of environment, in which an organism or biological population lives or occurs. It involves an environment of a particular kind, defined by characteristics such as climate, terrain, elevation, soil type, and vegetation. Habitat typically includes shelter and/or sustenance.

Hazardous material: Any substance that, because of its quantity, concentration, physical or chemical characteristics, poses a significant presence or potential hazard to human health and safety or to the environment. Lead-based paint is an example of a hazardous material.

Hydrology: Pertaining to the study of water on the surface of the land, in the soil and underlying geology, and in the air.

Impervious surface: Any material that reduces or prevents absorption of water into land.

Infrastructure: Public services and facilities, such as sewage-disposal systems, water supply systems, other utility systems, and road and site access systems.

Interpretation: A communication process designed to reveal meanings and relationships of our cultural and natural heritage through involvement with objects, artifacts, landscapes, sites, and oral histories.

Kilowatt: A measure of the rate of electrical flow equal to 1,000 watts.

Kilowatt-hour: A measure of quality of electrical consumption equal to the power of 1 kilowatt acting for 1 hour.

Landform: Configuration of land surface (topography).

Mean sea level: The average altitude of sea surface for all tidal stages.

Mitigation measure: A measure proposed that would eliminate, avoid, rectify, compensate for, or reduce significant environmental effects (see State CEQA Guidelines §15370).

National Register of Historic Places (NRHP): The official federal list of buildings, structures, objects, sites, and districts worthy of historic preservation. The register recognizes resources of local, State, and national significance, and includes four criteria under which a resource can be considered significant for listing on the Register. The registers lists those properties: (1) that are associated with events that made a significant contribution to the broad patterns of our history, (2) that are associated with the lives of persons significant in our past, (3) that embody the distinctive character of a type, period, or method of construction or that represent the work of a master, or that possess an artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction, and (4) that have yielded or may be likely to yield information important in prehistory or history.

Native species: A plant or animal that is historically indigenous to a specific site area.

Open space: An area with few or no paved surfaces or buildings, which may be primarily in its natural state or improved for use as a park.

Public Resources Code (PRC): California code addressing natural, cultural, aesthetic, and recreation resources of the State.

Riparian habitat: The vegetative and wildlife areas that are adjacent to perennial and intermittent streams and are delineated by the existence of plant species normally found near fresh water.

Runoff: That portion of rainfall or surplus water that does not percolate into the ground (flows overland), and is discharged into surface drainages or bodies of water.

Septic system: An onsite sewage treatment system that includes a settling tank through which liquid sewage flows and in which solid sewage settles and is decomposed by bacteria in the absences of oxygen. Septic systems are often used where a municipal sewer system is not available.

Significant effect on the environment: As defined by State CEQA Guidelines §15382, a substantial or potentially substantial, adverse change on any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself will not be considered a significant effect on the environment. A social or economic change related to physical change may be considered in determining whether the physical change is significant.

Special-status species: Plant or animal species that are typically listed (State and federal) as endangered, rare, and threatened, plus those species considered by the scientific community to be deserving of such listing.

Threatened species: An animal or plant species that is considered likely to become endangered throughout a significant portion of its range within the foreseeable future because its prospects for survival and reproduction are in jeopardy from one or more causes. The U.S. Fish and Wildlife Service and/or the California Department of Fish and Game make this designation.

Topography: Graphic representation of the surface features of a place or region on a map, indicating their relative positions and elevations.

Trailhead: The beginning of a trail, usually marked by information signs.

View shed: The area that can be seen from a specified location.

Watershed: The total area above a given point on a watercourse that contributes water to the flow of the watercourse; entire region drained by a watercourse.

Wetland: The environment of subtidal, mudflats, tidal salt marsh, periodically inundated or brackish marsh, diked marshland, associated upland, and freshwater marsh.

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7. Consultation, Coordination and Distribution

7. Consultation, Coordination, and Distribution

PUBLIC INVOLVEMENT PROGRAM

Public outreach is an important component of the general planning process. It is sought at the outset and throughout the planning process for a variety of reasons. State Recreation Areas and Wildlife Areas are managed for recreation opportunities, the preservation of natural and cultural resources, and use by the people of California. Constituency building is needed to ensure the public's support for their local recreational lands. A mailing list was compiled using the names and addresses of project area visitors and participants in interpretive programs, as well as other agencies and entities required by NEPA/CEQA. A variety of methods, such as public meetings, surveys, and newsletters, were used to reach out to stakeholders of the Project Area and to identify their needs and concerns for its future. The following outlines the specific components and dates of the public outreach efforts for the project:

- Notice of Preparation (NOP) – November 22, 2002
- Notice of Intent (NOI) Filed in the Federal Register – February 7, 2003
- Newsletter No. 1 and Survey – December 2002 (mailed)
- Public Scoping Meeting No. 1 – January 11, 2003
- Public Scoping Meeting No. 2 – February 20, 2003
- Newsletter No. 2 and Stakeholder Summary – May 2003 (mailed and distributed on-site)
- Public Meeting No. 3 – May 27, 2003
- Focus Group Meeting Striped Bass Association –September 10 , 2003
- Focus Group Meeting San Luis Sailboard Patrol – October 18, 2003

The survey information and any written or spoken comments were included in the summaries of the public meetings and the stakeholder summary. The meeting summaries, stakeholder comments, NOP and the newsletters including a copy of the survey, are provided in Appendix E. The second newsletter was mailed with a copy of the stakeholder summary, to ensure that visitors not on the mailing list were also surveyed. Copies of the second newsletter that were distributed onsite also included the survey that was mailed with the first newsletter. Of the 1,250 surveys that were mailed and distributed, 38(3%) were filled out and mailed back. Of both newsletters, 888 were mailed out and 500 were distributed onsite. The mailing list database, currently with 650 entries, is being maintained throughout the planning process and is updated continually as new information requests are received. Similarly, entries are deleted for survey respondents who indicate on the survey form that they want to be removed from the database.

Consultation with the U. S. Fish and Wildlife Service

The USFWS responded to the NOI/NOP in a letter dated January 7, 2003 which included as Enclosure A - "Endangered and Threatened Species That May Occur In or Be Affected by Projects in the Selected Quads Listed Below." A summary of the content of this letter is included in Table 7-1. Reclamation and the Department requested and convened a meeting with the Endangered Species Division staff of the USFWS on February 13, 2003 wherein various Reclamation and Department personnel briefed and informed USFWS staff of the project area and proposed action. In July of 2003 Reclamation and the

Department sent USFWS draft alternatives maps and descriptions for implementation of the Plan. Comments were received on this information in October 2003 from USFWS staff. All comments were incorporated into the Plan, alternatives and associated environmental analysis. Additionally, all mailings and meeting notices regarding the Plan and environmental review were sent to USFWS throughout the planning process.

Consultation with the California State Historic Preservation Officer

The State Historic Preservation Office (SHPO) was contacted initially on July 22, 2003 to ascertain information regarding Section 106 compliance for the proposed Plan. Based on conversations with various staff at SHPO concluding on July 30, 2003, Reclamation has determined that the current action is not an "undertaking" pursuant to Section 106 and the Plan provides specific goals and guidelines to comply with Section 106 during implementation of the Plan. Upon approval of the Plan, Reclamation and the Department may choose the option of seeking a programmatic agreement with SHPO. The agreement would cover certain projects for Section 106 compliance, thereby preventing the need for individual review. Otherwise, it may be necessary for these agencies to seek compliance review for individual projects as they arise. SHPO is on the mailing list and will receive all correspondence related to the Plan.

Consultation with Caltrans

On September 11, 2003, a meeting with representatives from Caltrans District 10 was conducted to discuss possible improvements and safety issues related to the project area ingress and egress. Following this meeting, the goals and d guidelines that are part of this Plan related to transportation at SR 152 and I5 are a result of recommendations and possible actions that will need to be coordinated with District 10 staff to ensure that they become part of future Caltrans planning and implementation.

Consultation with Native Americans

The mailing list compiled for the project area includes several Native Americans who have expressed interest in the project area and all mailings concerning the Plan and associated meetings were sent to these individuals. A letter was sent on July 11, 2003 to the Native American Heritage Commission informing them of the proposed action and its location. A response was received on August 15, 2003 wherein it states "a record search of the sacred land files has failed to indicate the presence of Native American resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area." Additionally the Native American Heritage Commission provided a list of two individuals that may have knowledge of cultural resources in the area. These individuals were contacted via telephone on two occasions and have been placed on the mailing list for receipt of project area information. No correspondence has been received from any Native American individuals or groups.

Summary of Major Issues Raised During Scoping and Public Involvement Program

All correspondence received during the planning process in the form of letters or survey responses have been summarized in Table 7-1. Additionally, comments and issues raised during all public meetings have been summarized in the meeting summaries and are available in Appendix E.

Table7-1
Public Comment Summary

PERSON & AFFILIATION	COMMENT TYPE	COMMENTS, ISSUES, & SUGGESTIONS
Jan C. Knight Chief, Endangered Species Division, USFWS	Letter	▪ Protection of federally listed threatened and endangered species (a list of threatened and endangered species was enclosed) ▪ Protection of kit fox corridor by conserving a continuous linkage of habitat along the eastern edge of the Diablo Range in western Merced County
Chrystal Meier CEQA Intern, San Joaquin Valley Air Pollution Control District	Letter	▪ Control of project-related air pollutant emissions associated with the project and associated traffic increases, particularly ozone and PM10 emissions ▪ Inclusion of features designed to reduce vehicle trips and increase walking, bicycling, transit use, and energy conservation ▪ Proper preparation of an air quality analysis to determine project impacts
Tom Dumas Chief, Office of Intergovernmental Review and Intermodal Planning, DOT	Letter	▪ Preparation of a Traffic Impact Study when future development activities are determined, as will be required by Caltrans
Jim Thomas Chief, San Luis Field Division, Division of Operations and Maintenance, DWR	Letter	▪ Continued operation of dam and power facilities by DWR to meet SWP needs will not be disrupted, including maintenance of dams and surrounding areas ▪ Development of increased security precautions for facilities (a list of security concerns was included) ▪ Protection of reservoir and water quality against contamination from recreational activities, including motor boating, livestock pasturing, and increased sediment runoff
Chet Vogt	Letter	▪ Implement a grazing-rest regime for grasslands in the area in order to maintain and expand the populations of native perennial plants, which is essential to maintaining species survival, soil health, water penetration; a grazing-rest regime will also maintain the landscape in a "short grass" condition vital for other threatened species such as the kit fox and tiger salamander ▪ Both overgrazing and undergrazing can harm the ecological and recreational resources in the project area
Michael F. Garnero San Luis Sailboard Safety Patrol	Survey	▪ Maintain water levels in O'Neill Forebay above 220 feet ▪ Provide better access to water for windsurfers to launch
George Stricker	Survey	▪ Construct better road access to properties beyond park

Table7-1
Public Comment Summary

PERSON & AFFILIATION	COMMENT TYPE	COMMENTS, ISSUES, & SUGGESTIONS
Stan Pcoskunas	Survey	▪ Allow fishing access before sunrise and after sunset ▪ Cut channels in the flats of O'Neill Forebay (southwest corner) ▪ Eliminate summer weeds and silting problems ▪ Establish a minimum water level in O'Neill Forebay and do not go below ▪ Fishery enhancement projects should be conducted ▪ DFG should enforce regulations against poaching ▪ Improving the Forebay would create a world-class sailing location and improve fish and wildlife habitat
Ferdinand Morales-Arcay Templo Ebenezev Christian Center	Survey	▪ Additional restrooms and showers ▪ Highway 152 is extremely difficult to cross due to the high volume of traffic in the area ▪ The Basalt driveway lacks adequate lighting ▪ Enlarge group areas to accommodate larger groups
Lyndy Walker	Survey	▪ Protect plants and wildlife
Ben Bacigalupi	Survey	▪ Provide additional drinking water sources and maintain drinking water quality ▪ Construct additional changing rooms ▪ Equip restrooms with running water ▪ Continue the weed-elimination project currently underway ▪ Maintain higher water levels ▪ There is a lack of shaded areas
Olga St. John	Survey	▪ Do not install electric hookups in tent-camping area
George Ground San Luis Sailboard Safety Patrol	Survey	▪ Maintain a minimum water level of 220 feet in O'Neill Forebay ▪ Low water levels in O'Neill Forebay would not be an issue if there were no ridges near the water level; dredging and removing ridges could present an opportunity to allow more variation in water levels without disrupting recreation on the Forebay (currently, buoys are placed on ridges to warn windsurfers and other users) ▪ Pave some of the dirt roads for dust control
Allan Parnell Bennison	Survey	▪ Put together interpretive signs identifying unusual plants and geologic formations throughout the recreation area ▪ Provide informational materials regarding San Luis Reservoir's history and role in the SWP and CVP ▪ Remove the two gates leading to Basalt rock quarry (if not on private property)
Arnold Jorgenser San Luis Sailboard Safety Patrol	Survey	▪ Improve roads throughout the recreation area, including maintaining dirt roads to prevent "washboard" formation ▪ Eliminate the dense weeds that grow in the Forebay in late summer

Table7-1
Public Comment Summary

PERSON & AFFILIATION	COMMENT TYPE	COMMENTS, ISSUES, & SUGGESTIONS
Tom McCubbin San Luis Sailboard Safety Patrol	Survey	▪ Maintain higher water levels in O'Neill Forebay ▪ Eliminate weeds in the reservoir and Forebay ▪ Plant additional trees around the existing cabanas ▪ Maintain natural landscape and prevent overdevelopment
M. H. Parden	Survey	▪ Enlarge camping spaces to accommodate larger vehicles/groups ▪ Fix electric and water hookups at camping areas ▪ Plant additional trees, especially in camping areas ▪ Keep all camping areas open throughout the year
Mrs. J. Martin	Survey	▪ Plant additional trees for shade and privacy ▪ Provide additional campsites/campgrounds ▪ Create additional hiking trails
Judy and Ron Davenport	Survey	▪ Construct a trail from San Luis Reservoir to Los Banos Reservoir, preferably a loop trail ▪ Keep the area natural and simple
Robin Lee	Survey	▪ Protect habitat over human concerns/amenities ▪ Reduce the amount of impervious surfaces to lessen pollution and erosion impacts ▪ Follow green building guidelines ▪ Improvements should be of the nature of lowering human impact on the habitat
Patricia Snoke Gustine Historical Society	Survey	▪ Protect kit fox
Tony Cerda Costanoan Rumsen Carmel Trip	Survey	▪ Conduct an extensive study of the first people to live in the area
Steve Pearl Wildfro Racing LLC	Survey and Scoping Meeting	▪ Improve turnoffs on Dinosaur Point Road ▪ Improve exits from the area, including from Dinosaur Point Road onto Highway 152 West, from the Basalt Use Area onto Highway 152 West, and from San Luis Creek Use Area onto Highway 152 East (all are left turns) ▪ Provide an information/service booth at entrance to Dinosaur Point parking area ▪ Encourage the further development of gravity sports in the Dinosaur Point area ▪ Increase the technical nature of Dinosaur Point Road to provide improved street luge conditions, and improve the system for keeping cars off of the road during luge runs ▪ Construct roads dedicated to street luge (rather than dual use) ▪ Maintain park beauty and peacefulness

Table7-1
Public Comment Summary

PERSON & AFFILIATION	COMMENT TYPE	COMMENTS, ISSUES, & SUGGESTIONS
John Fulton	Survey	▪ Control invasive exotic plant species ▪ Eucalyptus trees provide less valuable habitat than blue oaks and other native plants ▪ Address the issue of bicycle restrictions and allow biking on trails where it is currently prohibited due to low levels of trail maintenance
Robert and Harriet Jakovina Defenders of Wildlife	Survey	▪ Remove fences on old roads ▪ Prohibit autos and trucks from accessing frog pond areas ▪ Open the entire recreation area to public uses (no closed areas)
Pamela Myatt	Survey	▪ Protect and enhance wildlife habitat ▪ Upgrade bathrooms and showers at Basalt area ▪ Construct a bicycle path around the lake ▪ Improve hiking trails and maps ▪ Increase patrols at Los Banos Creek camping area to prevent disruptive behavior
Fred Yost	Survey	▪ Protect wildlife ▪ Prevent litter and overcrowding ▪ Provide shade closer to water ▪ Provide camping areas closer to the water

Table7-1
Public Comment Summary

PERSON & AFFILIATION	COMMENT TYPE	COMMENTS, ISSUES, & SUGGESTIONS
Bruce and Stephanie Hochuli San Luis Sailboard Safety Patrol	Survey and Scoping Meeting	▪ Remove non-native vegetation from lake to provide clearer water and enhance lake usage ▪ Maintain unspoiled natural beauty and avoid overcrowding of recreation area ▪ Open the launch ramp on the Medeiros side of O'Neill Forebay during all seasons ▪ Eliminate the weeds that clog recreation in the lake and Forebay ▪ Are water supply goals for CVP users and increased water levels in O'Neill Forebay mutually exclusive? Maintain a minimum water level of 219 feet ▪ Provide automated water level information that is up to date; the current system often provides data that is several days old and no longer useful ▪ The 10 mph speed limit on O'Neill Forebay should be clearly marked throughout the Forebay; currently it is only marked at the boat launch area ▪ Provide a good launch ramp for jet skis; the current launch area is difficult to use ▪ Do gates at the Medeiros boat launch area provide increased security, and are they necessary? Remove the gates at the Medeiros boat launch area ▪ Construct loop trail around the reservoir for bicycles and allow mountain biking on primitive and un-maintained trails where it is now prohibited; the current trail does not make a complete loop ▪ Why has San Luis Dam been closed to bicyclists, but not to hikers, since September 11? Open San Luis Dam to cyclists ▪ The abundance of power lines in the area is a concern to wind surfers, many of whom are moving into kite surfing; the number of power lines in the area should be minimized, and their location should allow for all recreational opportunities in the area ▪ Maintain ample parking very near to the water at O'Neill Forebay ▪ Remove the submerged pipe near the Medeiros Use Area, as this pipe causes serious injuries to forebay users ▪ A viewing platform at O'Neill Forebay is not a priority.
Darryl Henley	Survey	▪ Do not build a dam in Mengoulet Canyons
Hector R. Guerra San Joaquin Valley Air Pollution Control District	Survey	▪ Reduce air quality impacts associated with the recreation area ▪ Prevent air quality impacts associated with additional projects
David March	Survey	▪ Maintain/improve water quality in the reservoir ▪ Maintain/improve hiking opportunities
Bruce Frohman Modesto City Council	Survey	▪ Maintain the natural scenery ▪ Minimize the amount of new road construction

Table7-1
Public Comment Summary

PERSON & AFFILIATION	COMMENT TYPE	COMMENTS, ISSUES, & SUGGESTIONS
Robert K. Elsensohn San Luis Sailboard Safety Patrol	Survey	▪ Maintain primitive facilities and continue to provide campsites near the waters' edge ▪ Minimize water level fluctuation in O'Neill Forebay ▪ Eliminate speeding and littering in the area ▪ Dredge the windsurfing areas and eliminate weeds on O'Neill Forebay for safety
Cindy Skemp	Survey	▪ Eliminate vandalism and litter throughout the area ▪ Provide showers by the day use area, on the windsurfing side ▪ Provide sailboard/windsurfing access to the upper lake ▪ Maintain higher water levels in O'Neill Forebay
Manuel Lucero	Survey	▪ Pump septic tanks more often ▪ Continue to maintain clean and quiet campgrounds
Michael F. Gamero San Luis Sailboard Safety Patrol	Survey	▪ Improve access to water for windsurfers carrying their boards and gear ▪ Address low water levels in O'Neill Forebay; maintain a minimum water level of 220 feet
Randolph O. Kelly Department of Fish and Game Senior Biologist Supervisor	Survey	▪ Reduce the dramatic fluctuations in water levels ▪ Improve habitat and vegetation in the reservoir, which will also improve habitat for aquatic species
Vern Massy	Scoping Meeting	▪ Water levels in O'Neill Forebay should be addressed, with the goal of maintaining higher and more stable water levels
Mandeep Bling Department of Water Resources	Scoping Meeting	▪ The primary purpose of San Luis Reservoir is to distribute water to the existing contracts ▪ Every effort is made to minimize fluctuations of water levels at O'Neill Forebay
Clyde Strickler Department of Parks and Recreation (Retired Superintendent)	Scoping Meeting	▪ DWR and Reclamation have always worked closely with the Department to resolve recreation-related issues, such as the water level in O'Neill Forebay, as they did with Los Banos Creek Use Area
Dan Applebee Department of Fish and Game	Scoping Meeting	▪ What is the current level of hunting in the recreation area? ▪ What are the limits placed on jet skis on the reservoir and the Forebay? ▪ Though the General Plan has no legal authority to solve existing conflicts, the issue of water levels should be addressed in the Plan
Ricardo Cortesa Bureau of Reclamation	Scoping Meeting	▪ What opportunities are currently available in the recreation area for equestrians?

Table7-1
Public Comment Summary

PERSON & AFFILIATION	COMMENT TYPE	COMMENTS, ISSUES, & SUGGESTIONS
Robert King Merced County Planning Department	Scoping Meeting	▪ Include the protection of kit fox corridors and other habitat conservation measures in the plan ▪ Merced County would like to see State Parks partner with the County in developing the Habitat Conservation Plan for the area
Tom Young Department of Water Resources	Scoping Meeting	▪ There is an automated water level recorder for O'Neill Forebay that could possibly be updated to record data over smaller time intervals and transfer information to the California Data Exchange (CDEC), which would provide much better water level information to the public. As requested by the SLSSP and other recreational users this should be looked into
Sam Halsted	Scoping Meeting	▪ Maintain open space throughout the recreation area and its surroundings ▪ Future uses along Whiskey Flat Road should be limited; the area should not be used for parking or park access, as this may disrupt ranches along the road ▪ State Parks should increase efforts to eradicate feral pigs from the area
Mike Mulligan Compliance Specialist, Department of Fish and Game	Scoping Meeting	▪ Use the General Plan as a means of filling some of the gaps in knowledge regarding issues associated with the reservoir and Forebay ▪ Maintain or expand the hunting and fishing opportunities in the recreation area ▪ Take advantage of the opportunity provided by the Plan for a long-term Section 1600 permit for ongoing maintenance activities ▪ Address the issue of permits for endangered species
Public Comments (Anonymous)	Second Alternatives Workshop (June 2003)	▪ Maintain existing waterfowl hunting opportunity on and along shorelines of reservoir and forebay ▪ Allow boat-access camping (dispersed, primitive camping) on San Luis Reservoir shoreline in primitive areas ▪ Improve SR 33 turn lanes ▪ Don't encourage jet skis by providing rental units ▪ Survey and monitor cultural resources ▪ Are cell towers appropriate?
Paul Larron	Letter – 7/16/03	▪ Member of Turlock Horseman's Club that hold organized rides in CA rangelands; they enjoy seeing cattle grazing and appreciate what they do for the landscape. Un-grazed patches seem to turn weedy and pose a fire danger

NOTE: Additional public comments are highlighted in the meeting summaries dated and 1/11/03 and 5/27/03 in Appendix E

DISTRIBUTION LIST

Plan distribtution includes additional individuals not listed here.

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SAN LUIS RESERVOIR SRA

8. Report Contributors

8. Report Contributors

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SAN LUIS RESERVOIR SRA

APPENDICES

APPENDIX A
RECLAMATION LIST OF AGREEMENTS

Appendix A: Reclamation List of Agreements

The following compilation includes planning documents and legal agreements between the U.S. Bureau of Reclamation (Reclamation) and various State agencies and private corporations pursuant to the construction of San Luis Reservoir and related water storage facilities. Documents are categorized by the topical area of subject matter and are further shown chronologically.

GENERAL PLANNING DOCUMENTS

May 1965
San Luis Reservoir and Forebay Recreation Development Plan (Bulletin No. 117-7).

This report presents recreational land use and development plans for San Luis Unit reservoirs. Initial onshore facilities are described in detail and recommendation is made for the appropriation of funds needed for their construction. The report also includes environmental setting information such as topography and climate, vegetative cover, local economy, fire hazard, and dam and reservoir recreation statistics.

June 1966
San Luis Reservoir and Forebay Recreation Development Plan, Appendix C: Fish and Wildlife Development Plan (Bulletin No. 117-7).

This appendix to the Recreation Development Plan describes fish enhancement features and management of wildlife populations in the area, as well as an estimate of the fishery potential of San Luis Reservoir and O'Neill Forebay.

November 1971
General Development Plan, San Luis Reservoir State Recreation Area.

The General Development Plan includes general descriptions of the project location and access, project function and features, climate, existing development features, present and potential visitor use, and estimated project need and recreation demand. The Plan also includes development descriptions of recreational facilities by area.

February 7, 1986
General Plan Amendment, San Luis Reservoir State Recreation Area.

This Amendment states the approval of the California Department of Parks and Recreation (Department) Proposed Amendment to General Plan for San Luis Reservoir SRA, dated December 1985, subject to such environmental changes as the Director of Parks and Recreation "shall determine advisable and necessary." The purpose of the Amendment is to change undesignated land use at the northern portion of O'Neill Forebay to the designation of day and

overnight use in the areas known as Meadows and Grant Line. Said change is detailed in the document, which includes figures depicting the affected area.

RECREATION-RELATED AGREEMENTS AND REPORTS

Date Unknown
Design Analysis for 1972-1973 Capital Outlay Budget Request, San Luis Reservoir State Recreation Area.

This analysis describes the completion of the third and final phase of the day use area at the San Luis Creek Section of O'Neill Forebay, the 4½-mile access road from State Route 152 to the existing boat launching ramp in the Basalt Area, a boat hazard warning device for the Romero Overlook and Quien Sabe Point on San Luis Reservoir, and for Indian Point on O'Neill Forebay. Following the description of the project, the analysis provides explanations of the design features of these facilities.

May 1967
San Luis Unit. West San Joaquin Division. Detailed Reports on Fish and Wildlife Resources Affected by Pumping and Reservoir Aspects of the Project (Attachments No. 3 and 4).

Attachment No. 3 (May 1, 1967) is a detailed report on the effects that the Los Banos and Little Panoche flood detention reservoirs will have on fish and wildlife.

Attachment No. 4 (May 9, 1967) is a detailed report on the effects San Luis Reservoir, O'Neill Forebay, and San Luis Canal will have on fish and wildlife.

Both reports contain assessments of existing fish and wildlife environments and populations and estimates of project impacts on fish and wildlife, and both include recommendations to mitigate and minimize impacts.

April 8, 1969 (Amended July 2, 1982)
Agreement between the United States of America and the State of California for the Construction and Operation of the Initial Recreation Facilities of the San Luis Unit (Contract No. 14-06-200-4353A).

This Agreement provides for the construction and operation of initial recreation facilities at the San Luis Unit. The unit includes San Luis Reservoir, O'Neill Forebay, Los Banos Detention Reservoir, and San Luis Canal. The Agreement defines the initial recreation facilities, the construction of those facilities, and the limit of expenditures for the development of the facilities, $6,700,000 (1982 amendment revised the limit to $7,120,000). The agreement also outlines park limitations and requirements for water use, quality of water, and water pollution control. In addition, the agreement requires the development of an Area Management Plan to maximize the recreation and fish and wildlife enhancement uses in the recreation area.

July 1982
Amendment No. 1 to Agreement between the United States of America and the State of California Dated April 8, 1969 (Contract No. 14-06-200-4353A; Amendment No. 1).

This Amendment acknowledges that the funds provided in the 1969 Agreement are not sufficient to close the construction account for the initial recreation facilities built in accordance with the Agreement. The first sentence of Article 4(a) of the Agreement was revised and the Agreement was amended such that the United States and the Department will provide $7,120,000 to complete the initial recreation facilities and close the construction account for the San Luis Unit.

September 1999
Management of the California State Water Project, Appendix D: Costs of Recreation and Fish and Wildlife Enhancement (Bulletin 132-96).

This Report constitutes the Department of Water Resources (DWR) report to the California State Legislature regarding project costs that are allocated to recreation and fish and wildlife enhancement and for acquiring property for recreation development, as required for reimbursement under the Davis-Dolwig Act. An increase of $12,078,995 for recreation and fish and wildlife enhancement is reported, resulting from costs incurred for the 1995 calendar year, additional accrued interest due to an increase in the interest costs of bonds sold, and additional disbursements for joint capital costs allocated to recreation and enhancement. The report details fish and wildlife enhancement costs and includes comments by the Department of Boating and Waterways, the Department, and DFG.

LETTERS (RE: LOS BANOS RESERVOIR)

March 15, 1974
Letter to Mr. William P. Mott, Jr., Director, Department of Parks and Recreation, from J. Robert Hammond, Assistant Regional Director, Bureau of Reclamation (Attachment No. 5b).

This letter refers to letters dated January 29, 1974, and February 19, 1974. The letter requests the reply and concurrence of the Department in regard to the plan, which would add the balance of the Los Banos Reservoir area lands to the lands covered by Management Agreement No. 14-06-200-4353A and deletes the proposed Santa Nella site below O'Neill Forebay. The letter further requests a reply prior to the San Luis Wildlife Agreement Team meeting (April 17, 1974).

May 3, 1974
Letter to Mr. Robert Hammond, Assistant Regional Director, Bureau of Reclamation, from William Penn Mott, Jr., Director, Department of Parks and Recreation (Attachment No. 5c).

This letter refers to the proposal whereby the lands at Los Banos Reservoir that were obtained for wildlife mitigation purposes would be added to the lands covered by the Management agreement No. 14-06-200-4353A, and which would delete from that agreement the Santa Nella site below O'Neill Forebay. The letter states the Department's approval of the proposal.

December 13, 1991
Letter to Roger K. Patterson, Regional Director, Bureau of Reclamation, from Kenneth L. Mitchell, Chief, Acquisitions Division, Department of Parks and Recreation (Control No. 91023410, Folder I.D. 5163).

This letter refers to additional lands to be added to Contract No. 14-06-200-4353A. The letter states that enclosed is a signed letter of intent to add the 760 acres of land at Los Banos Reservoir to San Luis Creek SRA under Contract No. 14-06-200-4353A.

October 28, 1991
Letter to State of California Department of Parks and Recreation from Roger K. Patterson, Regional Director, Bureau of Reclamation (MP-401, LND-8.00).

This letter states the intent of Reclamation to revise the Recreation Area at Los Banos Reservoir to be managed by the Department under the terms of Contract No. 14-06-200-4353A. The purpose of this letter is to revise the recreation area for Los Banos Reservoir by adding the former wildlife mitigation area to the recreation area lands at the reservoir.

WILDLIFE AGREEMENTS AND PLANS

December 1973
Wildlife Habitat Plan for the California Aqueduct in the San Joaquin Valley Memorandum Report.

This Report, prepared by DWR, San Joaquin District, details the general plan for development of wildlife habitat adjacent to the California Aqueduct in the San Joaquin Valley and the guidelines developed to govern the preparation of future plans to ensure that suitable habitat is provided and safety, operational, and maintenance requirements of the project are satisfied. The Report details the lands subject to possible wildlife habitat development, experiences with test plots, current activities in the areas subject to possible wildlife habitat development, operational requirements, plants suitable for habitat development, and the general plan for further development. In addition, the Report includes several figures detailing the project area and landscape.

August 16, 1974
Agreement among the State of California Department of Water Resources, the State of California Department of Fish and Game, and the U.S. Bureau of Reclamation for the Development, Management, and Maintenance of Wildlife Habitat on Project Lands Adjacent to the California Aqueduct in the San Joaquin Valley.

This Agreement states that DWR, the Department, and Reclamation agree to the development, management, and maintenance of wildlife habitat on project lands adjacent to the California Aqueduct in the San Joaquin Valley in accordance with the criteria, guidelines, and general wildlife habitat development plan set forth in the DWR memorandum report entitled, "Wildlife Habitat Plan for the California Aqueduct in the San Joaquin Valley," dated December 1973. The Agreement further states that DFG, in the case that contract labor is required, agrees to incorporate the "Work Hours Standards Act Provision" and any other required articles, and "that

any work requiring funding is contingent upon appropriation or allotment of those funds and no official will be allowed to benefit from the project''.

March 3, 1976
Agreement Among the United States of America, the Department of Fish and Game of the State of California, and the Department of Water Resources of the State of California for the Administration and Operation of Wildlife Lands at San Luis Reservoir, O'Neill Forebay, and Little Panoche Reservoir (Contract No. 14-06-200-7451A).

This Agreement is a 50-year agreement between the United States, DFG, and DWR with the purpose of providing the basis for protecting, preserving, or replacing pre-project wildlife populations at San Luis Reservoir, Los Banos Reservoir, and Little Panoche Reservoir. Under the terms of the Agreement, DFG is authorized to exercise limited control of certain lands of the San Luis facilities for wildlife purposes defined under Article 2(e). The administration and operation provisions detail the substitution of lands in the General Plan; DFG's authority and responsibility; the Development, Operation, and Maintenance Plans for lands at the San Luis Reservoir, O'Neill Forebay, and Little Panoche Reservoir; supply, use, and measure of water; financial provisions, and general provisions. Included in the Agreement are the construction schedule and figures detailing the affected areas.

TRANSPORTATION AND UTILITIES AGENCY AGREEMENTS

California Department of Transportation

October 12, 1956
Contract and Grants of Easements Covering Crossings of State of California Highway Facilities and Features of Central Valley Project.

This Agreement between the Reclamation and the State of California allows both parties perpetual joint use of areas within the right of way of either party at each of the crossings of the parties' respective facilities. The Agreement details the provisions and limitations of joint use of common areas, as well as the areas subject to the agreement at the time it was written. Finally, included in attachment to the Agreement are several resolutions passed by affected irrigation and utilities districts, all of which approve the Agreement.

June 21, 1968
Contract for Box Culvert Construction and Joint Use of Right of Way of Highway Route 152 (10 Mer 152) San Luis Drain. Central Valley Project, San Luis Unit. (U.S. Contract No. 14-06-200-3765A).

This Agreement between Reclamation and the State allows Reclamation to construct, operate, and maintain the San Luis Drain where it crosses land previously acquired by the State for the Right of Way for State Highway Route 152 (10 Mar 152). Furthermore, the Agreement states that the State will coordinate the construction of the affected section of the San Luis Drain, for which it will be fully reimbursed by right-of-way. The Agreement details the affected area and construction schedule and payment/reimbursement provisions.

Pacific Gas & Electric

February 8, 1951
Contract for Relocation of Certain Facilities of Pacific Gas and Electric Company and for Crossings of Right of Ways. United States Department of the Interior, Bureau of Reclamation. Central Valley Project, California (U.S. Symbol and No. 175r-2602).

This Agreement between Reclamation and PG&E states that PG& E will allow Reclamation the use of land in its right of way, and furthermore will relocate existing facilities, when requested by Reclamation, out of necessity for facilities associated with the Central Valley Project. The Agreement details the conditions under which Reclamation can request right of way, the details of right of way transfer, the responsibility for operations and maintenance following right of way transfer and facility construction, and all provisions for payment.

April 24, 1953
Supplement to Contract for Relocation of Certain Facilities of Pacific Gas and Electric Company and for Crossings of Rights of Way (U.S. Symbol and No. 175r-2606).

This Supplement expands the list of facilities covered under the previous agreement to include Folsom Power Plant, Nimbus Dam and Reservoir, the Folsom-Elverta 230kV transmission line, the Folsom-Nimbus interconnecting lines and access road, and the water distribution and lateral systems of, respectively, the Madera Canal, the Contra Costa Canal, and the Delta-Mendota Canal.

December 23, 1953
Second Supplement to Contract for Relocation of Certain Facilities of Pacific Gas and Electric Company and for Crossings of Rights of Way (U.S. Symbol and No. 175r-2602).

This Supplement expands the list of facilities covered under the previous agreement and supplement to include the Sacramento Canals Unit of the Central Valley Project and the Solano Project of the United States.

May 1, 1957
Third Supplement to Contract for Relocation of Certain Facilities of Pacific Gas and Electric Company and for Crossings of Rights of Way (U.S. Symbol and No. 175r-2602).

This Supplement expands the list of facilities covered under the previous agreement and supplements and expands the nondiscrimination protections previously placed on hiring and employment. Finally, this supplement adds requirements governing working hours and conditions.

October 13, 1960
Fourth Supplement to Contract for Relocation of Certain Facilities of Pacific Gas and Electric Company and for Crossings of Rights of Way (U.S. Symbol and No. 175r-2602).

This Supplement expands the list of facilities covered under the previous agreement and supplements, and it updates the provisions of paragraph 12, Grant of License or Consent.

February 21, 1963
Fifth Supplement to Contract for Relocation of Certain Facilities of Pacific Gas and Electric Company and for Crossings of Rights of Way (U.S. Symbol and No. 175r-2602).

This Supplement expands the list of facilities covered under the previous agreement and supplements, and it expands the nondiscrimination protections placed on hiring and employment.

October 10, 1966
Sixth Supplement to Contract for Relocation of Certain Facilities of Pacific Gas and Electric Company and for Crossings of Rights of Way (U.S. Symbol and No. 175r-2602).

This Supplement expands the list of facilities covered under the previous agreement and supplements, and it expands the nondiscrimination protections placed on hiring and employment.

March 24, 1976
Seventh Supplement to Contract for Relocation of Certain Facilities of Pacific Gas and Electric Company and for Crossings of Rights of Way (U.S. Symbol and No. 175r-2602).

This Supplement expands the list of facilities covered under the previous agreement and supplements, the nondiscrimination protections placed on hiring and employment, and the restrictions governing working hours and conditions.

Standard Oil

March 1, 1947
Contract for Protection, Alternation, Re-arrangement, and/or Relocation of Certain Facilities of Standard Oil Company of California. (175r1328)

This Agreement between Reclamation and the Standard Oil Company of California states that Standard Oil will allow Reclamation the use of land in its right of way and furthermore will relocate existing facilities, when requested by Reclamation out of necessity for facilities associated with specified projects under the Central Valley Project. The Agreement states that Reclamation will attempt to avoid all disruption to Standard Oil pipelines; in the case that disruption is necessary, Reclamation will permit Standard Oil to lay temporary pipelines to provide service during interruptions. The Agreement also details the payment of costs and expenses, rights of way and consent for joint rights of way, conveyance of relocated rights of way, and general terms of the agreement.

March 17, 1948
Resolution by the Standard Oil Company of America.

This Resolution states that the President, any Vice President, Treasurer, or C.E. Bultman (contract agent), together with the Secretary or Assistant Secretary, is empowered to execute all papers required by Standard Oil. Exempted are oil leases to others covering fee lands and deeds conveying real estate other than rights of way and similar easements.

April 26, 1951
Amendment of Contract for Protection, Alteration, Rearrangement, and/or Relocation of Certain Facilities of Standard Oil Company of California. (175r1328)

This Amendment expands the list of projects covered under the previous agreement (Paragraph 2) to include other features of the Central Valley Project; expands the provisions of "Right of Way or Consent to Joint Use of Right of Way" (Paragraph 13); and expands the Agreement's protections against benefit by Delegates and Commissioners through projects resulting from the Agreement.

May 10, 1951
Resolution by the Standard Oil Company of California.

This Resolution states that the President, any Vice President, Treasurer, or C.E. Bultman (contract agent), together with the Secretary or Assistant Secretary, is empowered to execute all papers required by Standard Oil. Exempted are oil leases to others covering fee lands and deeds conveying real estate other than rights of way and similar easements. This resolution reaffirms the resolution made March 17, 1948.

September 25, 1962
Third Amendment of Contract for Protection, Alteration, Rearrangement, and/or Relocation of Certain Facilities of Standard Oil Company of California (175r1328).

This Amendment expands the list of facilities covered under the previous amendment (Paragraph 2), expands protections against covenant fees (Paragraph 15), expands the conditions requiring appropriation of funds (Paragraph 16), and expands protections ensuring nondiscrimination in employment (Paragraph 18).

December 14, 1962
Resolution by the Standard Oil Company of California.

This Resolution states that the President, any Vice President, Treasurer, or C.E. Bultman (contract agent), together with the Secretary or Assistant Secretary, is empowered to execute all papers required by Standard Oil. Exempted are oil leases to others covering fee lands and deeds conveying real estate other than rights of way and similar easements. This resolution reaffirms the resolution made March 23, 1961.

August 28, 1963
Consent to Crossing by an Electrical Transmission Line over Facilities of Standard Oil Company of California.

This Agreement details the consent by Standard Oil to allow Reclamation to construct and perpetually operate and maintain an electric transmission line through its right of way in Contra Costa County, California. Consent is subject to the condition that the United States may not interfere with the operations of Standard Oil as they are now conducted and may not place any pole or tower or footing on Standard Oil right of way.

January 9, 1968
Easement to Standard Oil Company of California.

This Indenture provides Standard Oil with rights of way for pipeline relocated during construction of features of the San Luis Unit (San Luis Canal) by the United States. This document details the easement in Merced County to be granted to Standard Oil, the acceptable future uses by Standard Oil, and the conditions of use and transfer.

January 9, 1968
Perpetual License for Joint Use of Right of Way.

This document grants the United States a license for construction and perpetual operation and maintenance of the San Luis Canal on a parcel of land owned by Standard Oil, detailed in the document. This license is granted by Standard Oil under provisions of the Contract for Protection, Alteration, Rearrangement, and/or Relocation of Certain Facilities of Standard Oil Company of California (March 1, 1947).

January 9, 1968
Quitclaim Deed

This document releases, remises, and quitclaims to Reclamation the right, title, and interest as granted to Standard Oil Company and Standard Gasoline Company. The document further details the parcel of land in question.

August 29, 1968
Easement to Standard Oil Company of California.

This Indenture provides Standard Oil with rights of way for pipeline relocated during construction of features of the San Luis Unit (San Luis Canal) by Reclamation. This document details the easement in Merced County to be granted to Standard Oil, the acceptable future uses by Standard Oil, and the conditions of use and transfer.

August 9, 1968
Perpetual License for Joint Use of Right of Way.

This document grants the United States a license for construction and perpetual operation and maintenance of the San Luis Canal on a parcel of land owned by Standard Oil, detailed in the document. This license is granted by Standard Oil under provisions of the Contract for Protection, Alteration, Rearrangement, and/or Relocation of Certain Facilities of Standard Oil Company of California (March 1, 1947).

August 29, 1968
Quitclaim Deed.

This document releases, remises, and quitclaims to the United States the right, title, and interest as granted to Standard Oil Company and Standard Gasoline Company. The document further details the parcel of land in question.

Miscellaneous Agreements

December 11, 1984
Agreement for Temporary Water Service, Transportation, and Utilization to Provide Wildlife Habitat Related to the San Luis Drain.

This agreement between the State, Reclamation and U.S. Fish and Wildlife Service made water temporarily available to be used to manage and maintain waterfowl habitat and grassland in the San Joaquin Basin.

OPERATIONS AND MAINTENANCE AGREEMENTS AND REPORTS

January 12, 1972 (Amended September 4, 1991)
Supplemental Agreement between the United States of America and State of California for the Operation of the San Luis Unit (Supplement No. 1).

This agreement is a supplement to the original agreement of December 30, 1961, between the two parties, which provides that the State shall operate and maintain the San Luis Unit facilities, but leaves for future agreement, details relating to operation and maintenance. This supplemental agreement provides those details concerning operation and maintenance of O'Neill Forebay, San Luis Reservoir, Dos Amigos Pumping Plant, San Luis Canal, and detention dams and associated reservoirs. The agreement also identifies "operational requirements associated with power supply and generation; exchange of water, power, and capacities; reactive power; state operation of federal-only facilities; emergencies; federal participation in operation, maintenance, and replacement; water measurement responsibilities, water quality responsibilities and monitoring; power measurement responsibilities; federal water contractors; replacement water and mitigation responsibilities; visitor accommodations; various costs; and employment." The 1991 amendment revised Sub-article 25(b) in the agreement.

September 4, 1991
Amendment No. 1 to the Supplemental Agreement Between the United States of America and the Department of Water Resources of the State of California for the Operation of the San Luis Unit (Supplement No. 1).

This Amendment revises a sub-article of the prior Agreement, while otherwise continuing the agreement "in full force and effect." Specifically, this Amendment revises Sub-article 25(b) of the Agreement by deleting "and (4) into the Coalinga Canal" and by adding "and" prior to (3) in that sub-article.

March 19, 1996
Concession Contract. Cattle Grazing. Located at San Luis Reservoir State Recreation Area. Medeiros Area in Merced County.

This is a legal contract between the State and Chet Vogt, granting Mr. Vogt the right, privilege, and duty to graze cattle on an approximately 1,000-acre tract of the Medeiros Area located south of O'Neill Forebay, for a period of 8 months. Attached to the contract is a P R CEQA project -evaluation.

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APPENDIX B
BIOLOGICAL SURVEY FORMS

San Luis Reservoir State Recreation Area
Survey Form

Date: September 12, 2002 **Surveyors:** Leo Edson, Linda Leeman

Park: ☐ Pacheco SP ☐ SLR ☒ LBC ☐ other: _____

Survey location: Los Banos Reservoir

Water feature type: ☐ stockpond ☐ intermittent drainage ☐ perennial stream ☐ lacustrine ☒ other: Artifical wetland (overflow/leakage from dam)

Map ID #: LB-1 **Photo #:** Ø

Weather
Time: 1020
Air Temp: 80º
Wind Speed: Ø
Cloud Cover: Ø

Vegetation Adjacent to Water Feature

☒ grassland ☐ oak woodland ☒ riparian woodland (circle dominant trees: willow, cottonwood, sycamore, mixed)
☐ freshwater marsh ☐ vernal pool ☐ other: _____
Notes: mulefat

Site Quality

Degradation ? ☐ Yes ☒ No **Evidence of cattle?** ☐ Yes ☒ No **Evidence of pigs?** ☐ Yes ☒ No
Grazing? ☐ Severe ☐ Moderate ☒ None **Weed infestation?** ☐ Yes ☒ No **Species:** _____
Notes: _____

Special-status Amphibians/Reptiles

Foothill Yellow-legged Frog
Observed during survey? ☐ Yes ☒ No If yes, number of individuals: _____ Size class observed: _____
Suitable habitat present? ☐ Yes ☒ No *Cobble?* ☐ Yes ☒ No *Shallow, flowing water?* ☐ Yes ☒ No

California Red-legged Frog
Observed during survey? ☐ Yes ☒ No If yes, number of individuals: _____ Size class observed: _____
Suitable habitat present? ☒ Yes ☐ No *Slow water?* ☒ Yes ☐ No *Permanent water in area?* ☒ Yes ☐ No
Riparian veg ☒ Yes ☐ No *Submergent or emergent veg?* ☒ Yes ☐ No

California Tiger Salamander
Suitable habitat present? ☐ Yes ☒ No *Temp. pools?* ☐ Yes ☒ No *Fish present?* ☒ Yes ☐ No

Western Spadefoot
Suitable habitat present? ☐ Yes ☒ No *Temp. pools?* ☐ Yes ☒ No *Fish present?* ☒ Yes ☐ No

Western Pond Turtle
Observed during survey? ☐ Yes ☒ No If yes, number of individuals: _____ Size class observed: _____
Suitable habitat present? ☒ Yes ☐ No *Slow water?* ☒ Yes ☐ No *Basking sites?* ☒ Yes ☐ No

Other wildlife observations/comments: Bass observed in pond.

San Luis Reservoir State Recreation Area
Survey Form

Date: 8 June 2003 **Surveyors:** Edson

Park: ☐ Pacheco SP ☒ SLR ☐ LBC ☐ other: _____

Survey location: Medeiros use area located on the south shore of the O'Neill Forebay

Water feature type: ☐ stockpond ☐ intermittent drainage ☐ perennial stream ☐ lacustrine ☐ other: N/A

Map ID #: SL-1 **Photo #:** _____

Weather
Time:
Air Temp:
Wind Speed:
Cloud Cover:

Vegetation Adjacent to Water Feature

☒ grassland ☐ oak woodland ☐ riparian woodland (circle dominant trees: willow, cottonwood, sycamore, mixed)
☐ freshwater marsh ☐ vernal pool ☐ other: _____

Notes: An adult Swainson's hawk was observed perched on a fence post approximately ¼-mile south of the forebay shoreline.

Site Quality

Degradation ? ☒ Yes ☐ No **Evidence of cattle?** ☒ Yes ☐ No **Evidence of pigs?** ☐ Yes ☒ No
Grazing? ☐ Severe ☒ Moderate ☐ None **Weed infestation?** ☐ Yes ☒ No **Species:** _____
Notes: Grazing activity limited to the area south of the Mediros use area.

Special-status Amphibians/Reptiles

Foothill Yellow-legged Frog
Observed during survey? ☐ Yes ☐ No If yes, number of individuals:_____ Size class observed:_____
Suitable habitat present? ☐ Yes ☐ No *Cobble?* ☐ Yes ☐ No *Shallow, flowing water?* ☐ Yes ☐ No

California Red-legged Frog
Observed during survey? ☐ Yes ☐ No If yes, number of individuals:_____ Size class observed:_____
Suitable habitat present? ☐ Yes ☐ No *Slow water?* ☐ Yes ☐ No *Permanent water in area?* ☐ Yes ☐ No
Riparian veg ☐ Yes ☐ No *Submergent or emergent veg?* ☐ Yes ☐ No

California Tiger Salamander
Suitable habitat present? ☐ Yes ☐ No *Temp. pools?* ☐ Yes ☐ No *Fish present?* ☐ Yes ☐ No

Western Spadefoot
Suitable habitat present? ☐ Yes ☐ No *Temp. pools?* ☐ Yes ☐ No *Fish present?* ☐ Yes ☐ No

Western Pond Turtle
Observed during survey? ☐ Yes ☐ No If yes, number of individuals:_____ Size class observed:_____
Suitable habitat present? ☐ Yes ☐ No *Slow water?* ☐ Yes ☐ No *Basking sites?* ☐ Yes ☐ No

Other wildlife observations/comments: This was the only Swainson's hawk observed at Medeiros. At least one Swainson's hawk was also observed at O'Neill Forebay, where they have been documented as nesting in previous years.

San Luis Reservoir State Recreation Area
Survey Form

Date: 8 June 2003 **Surveyors:** Edson

Park: ☐ Pacheco SP ☒ SLR ☐ LBC ☐ other: _____

Survey location: Medeiros use area located on the south shore of the O'Neill Forebay

Weather
Time:
Air Temp:
Wind Speed:
Cloud Cover:

Water feature type: ☐ stockpond ☐ intermittent drainage ☐ perennial stream ☒ lacustrine ☐ other: _____

Map ID #: SL-2 **Photo #:** _____

Vegetation Adjacent to Water Feature

☐ grassland ☐ oak woodland ☒ riparian woodland (circle dominant trees: willow, cottonwood, sycamore, mixed)
☒ freshwater marsh ☐ vernal pool ☐ other: _____

Notes: The shoreline has a nearly contiguous, narrow band of willows. Patches of emergent vegetation (dominated by cattails and tules) are present at several locations. The only large area of emergent vegetation at Medeiros is found in a large depression, possibly artificial, that is located adjacent to the forebay and just east of the overhead transmission lines.

Site Quality

Degradation ? ☒ Yes ☐ No **Evidence of cattle?** ☐ Yes ☒ No **Evidence of pigs?** ☐ Yes ☒ No
Grazing? ☐ Severe ☐ Moderate ☒ None **Weed infestation?** ☐ Yes ☒ No **Species:** _____
Notes: Degradation limited to roads and vegetation management activities.

Special-status Amphibians/Reptiles

Foothill Yellow-legged Frog
Observed during survey? ☐ Yes ☐ No If yes, number of individuals:_____ Size class observed:_____
Suitable habitat present? ☐ Yes ☐ No *Cobble?* ☐ Yes ☐ No *Shallow, flowing water?* ☐ Yes ☐ No

California Red-legged Frog
Observed during survey? ☐ Yes ☐ No If yes, number of individuals:_____ Size class observed:_____
Suitable habitat present? ☐ Yes ☐ No *Slow water?* ☐ Yes ☐ No *Permanent water in area?* ☐ Yes ☐ No
Riparian veg ☐ Yes ☐ No *Submergent or emergent veg?* ☐ Yes ☐ No

California Tiger Salamander
Suitable habitat present? ☐ Yes ☐ No *Temp. pools?* ☐ Yes ☐ No *Fish present?* ☐ Yes ☐ No

Western Spadefoot
Suitable habitat present? ☐ Yes ☐ No *Temp. pools?* ☐ Yes ☐ No *Fish present?* ☐ Yes ☐ No

Western Pond Turtle
Observed during survey? ☐ Yes ☐ No If yes, number of individuals:_____ Size class observed:_____
Suitable habitat present? ☐ Yes ☐ No *Slow water?* ☐ Yes ☐ No *Basking sites?* ☐ Yes ☐ No

Other wildlife observations/comments:

Approximately 1,000 tricolored blackbirds observed during this one-day survey. Most were found in groups of 50+ forging along the shoreline or perched in the cottonwoods and willows. Approximately 200 were found nesting in the depression described above. Many fledging were observed in the willows surrounding the depression. Adults retuning with food to the emergent marsh indicated that some of the nestling had not yet fledged their nests.

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APPENDIX C
PROJECT AREA VEGETATION TYPES

Appendix C: Project Area Vegetation

This appendix describes the vegetation of San Luis Reservoir State Recreation Area and the DFG-managed wildlife areas. These areas include land around San Luis Reservoir, the O'Neill Forebay, Los Banos Reservoir and the San Luis and O'Neill Forebay Wildlife Areas. The vegetation of these areas consists of riparian woodland, blue oak woodland and savanna, coast live oak woodland, ornamental trees, California sagebrush scrub, grasslands, mesic herbaceous (wetland), iodine bush scrub (alkali sink scrub), and ruderal (non-native and weedy) plant communities. The grassland is the dominant vegetation of the park with the only woodland observed outside park boundaries on distant hills. The riparian woodland and mesic herbaceous types occur at the edge of the reservoirs and along watercourses. The iodine bush scrub occurs at Salt Spring, a tributary to Los Banos Reservoir. Where appropriate, the naming system used in *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995), was incorporated into the name of the vegetation types in this report.

Black Willow Riparian Woodland

Black willow riparian woodland occurs at the edges of San Luis Reservoir, Los Banos Reservoir, and O'Neill Forebay; along watercourses but below the level of high water at San Luis Reservoir; and along Los Banos Creek as it flows into Los Banos Reservoir. It also occurs at O'Neill Forebay Wildlife Area. The black willow riparian woodland is particularly well developed along Los Banos Creek immediately upstream from Los Banos Reservoir. It consists of black willow trees (*Salix goodingii*) trees, which are 8 to 12 inches in diameter at breast height (4.5 feet, dbh) and up to 40 feet tall. The trees grow from 6 to 10 feet apart with a canopy cover that varies from 60 to 100 percent.

The shrub understory consists of mulefat (*Baccharis* sp.) and a few salt cedar plants (*Tamarisk* sp.). Herbaceous species in the understory are dominated by crabgrass (*Cynodon dactylon*), cocklebur (*Xantium strumarium*), and Italian thistle (*Carduus pycnocephalus*).

Below the high water mark of San Luis Reservoir, black willow riparian scrub occurs in watercourses. The willow trees are able to survive inundation during years of normal rainfall and years of drought. These willows are able to persist from upstream runoff flowing in the watercourses for at least part of the spring and summer. The trees are typically 3 to 6 inches in diameter and 20 feet tall. During wet winters, the reservoir remains full for a long duration and the willow trees die because they cannot survive such prolonged inundation. This vegetation is generally thick, with 100 percent cover, but is narrow in width.

The riparian vegetation at the edge of the shore of the reservoirs includes a mixture of black willow, Fremont cottonwood (*Populus fremontii*), western sycamore (*Platanus racemosa*), sandbar willow (*Salix exigua*), and mulefat. These species grow mostly sparsely along the edge of the shore of the reservoirs, but occasionally they will grow in clumps. The understory of these areas consists of mesic herbaceous vegetation. In some areas, broad-leaf pepper-grass (*Lepidium latifolium*) occurs beneath or at the edge of the canopy of the riparian trees.

California Sycamore Riparian Woodland

The California sycamore riparian woodland occurs in a limited area along one of the watercourses at San Luis Wildlife Area. This woodland consists of mature western sycamore trees growing in a sparse array along the watercourse. Canopy cover approximates 70 percent. The sycamores grow to 40 feet tall and at least 24 inches in diameter at breast height (4.5 feet, dbh). The understory consists of coyote brush (*Baccharis pilularis*) and poison oak (*Toxicodendron diversilobum*).

Blue Oak Woodland and Savanna

The blue oak woodland and savanna occurs in San Luis Wildlife Area. Blue oak (*Quercus douglasii*) is the dominant tree of this woodland. An occasional coast live oak (*Quercus agrifolia*) also occurs in the blue oak woodland. The blue oak woodland occurs on the tops and sides of the ridges in small clumps. This cover of the blue oak woodland ranges from 80 to approximately 20 percent. Nevertheless, the blue oak woodland also grades into the blue oak and savanna vegetation type, which consists of a sparse cover of trees growing within grassland.

The understory of the blue oak woodland mostly consists of various species of non-native grasses and occasional native species of forbs (non-grassy plants). The non-native species of grass include wild oats (*Avena fatua*) and ripgut brome (*Bromus diandrus*). Blue dicks (*Dichelostemma capitatum*) and clarkia (*Clarkia* sp.) also occur in the understory. Understory shrubs include California sagebrusn (*Artemesia californica*), redberry (*Rhamnus crocea*), and eriophyllum (*Eriophyllum confertiflorum*).

Coast Live Oak Woodland

The coast live oak woodland occurs in San Luis Wildlife Area. It consists of both blue and coast live oak trees with California bay (*Umbellularia californica*), valley oak (*Quercus lobata*), and California buckeye (*Aesculus californica*). Stands of this woodland type are generally not very large and occur in the canyon bottoms and on the shadier slopes. This oak woodland is very similar to the blue oak woodland except that the blue oaks are much fewer.

The understory of the coast live oak woodland tends to support shrubs and forbs as opposed to grass. Species present in the understory include woodland sanicle (*Sanicula crassicaule*), blue wildrye (*Elymus glaucus*), miner's lettuce (*Claytonia perfoliata*), fiesta flower (*Pholistoma auritum*), chickweed (*Stellaria media*), sweet pea (*Lathyrus* sp.), and bedstraw (*Galium apaime*). Shrubs that occur in the understory are poison oak, toyon (*Heteromeles arbutifolia*), and redberry.

Ornamental Trees

Ornamental trees have been planted at the Basalt Campground, on the Madeiros site, and the picnic areas of the San Luis Creek site. These trees include red ironbark gum (*Eucalyptus sidiroxylon*), allepo pine (*Pinus halpensis*), false pine (*Casurina* sp.), Chinese pistache (*Pistachia chinensis*), eucalyptus (*Eucalyptus* spp.), and others. The trees at Madieros are planted in a rectangular array, while those in the other areas conform to picnic tables or campsites.

Iodine Bush Scrub

Iodine bush scrub occurs at Salt Spring, a tributary to Los Banos Reservoir. This area is very distinctive because of the presence of water and the pronounced salt deposits along the banks of the watercourse. The vegetation occurs within the banks of the watercourse at Salt Spring. This vegetation is dominated by iodine bush (*Allenrolfea occidentalis*), quail bush (*Atriplex lentiformis*), alkali heath (*Frankenia salina*), and salt grass (*Distichlis spicata*). Other species present include bassia (*Bassia hyssopifolia*), Fitch's spikeweed (*Hemizonia fitchii*), and various species of saltbushes (*Atriplex* spp.).

California Sagebrush Scrub

California sagebrush scrub occurs on the shallow soils of hillsides above Los Banos Reservoir and Los banos Creek in dry areas. It is dominated by California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). The cover of the California sagebrush scrub varies between 25 and 50 percent and the height of the vegetation is generally less than 3 feet. The understory of the California sagebrush scrub mainly consists of grassland growing between the shrubs. The area beneath the shrubs is bare.

Mesic Herbaceous

Mesic herbaceous vegetation occurs in seeps, within watercourses, and at the edges of the reservoirs. It consists of species adapted to seasonally, as well as permanently, wet conditions. This mesic herbaceous vegetation consists of tall vegetation such as cattails and tules to short vegetation such as crabgrass and knotgrass (*Paspalum distichum*). The cattails (*Typha latifolia* and unidentified species) and tules (*Scirpus acutus* spp. *occidentalis*) grow in extensive patches along the edges of the reservoirs within standing water. These stands can be small patches 10 by 20 feet in size to several hundred feet long and 30 feet wide. Often water parsley (*Oenanthe sarmentosa*) and water smartweed (*Polygonum punctatum*) occur with the cattails and tules.

Mexican rush (*Juncus mexicanus*) commonly occurs at the edges of the reservoirs above the reservoir's edge. The iris-leaved rush (*Juncus xiphioides*) also occurs in watercourses, and seeps. The rushes often grow as dense mats of single species stands. Meadow barley (*Hordeum brachyantherum*) and creeping wildrye (*Leymus triticoides*) are adapted to drier conditions than the iris-leaved rush and grow at the edge of seeps and other wet areas.

Cocklebur often grows in dense aggregations at the areas where watercourses flow into stock ponds, and spiny clot-bur (*Xantium spinosum*) occurs in low-density aggregations within drawdown and disturbed areas.

Seeps and watercourses often support water cress (*Rorippa nasturtium-aquaticum*) growing in areas of ponded water. Rabbit's foot grass (*Polypogon monspeliense*) and curly dock (*Rumex crispus*) also grow in wet areas onsite.

Grassland

The grassland vegetation type occurs extensively throughout the areas surrounding San Luis and Los Banos reservoirs and O'Neill Forebay. This grassland varies in height from a few inches and 25 to 50 percent cover in sites with shallow soils, to 1.5 feet and 100 percent cover in the sites with deeper soils.

Different species dominate the grassland in different areas. The occurrence of a particular species as a dominant may be the result of particular edaphic, climatic, and moisture conditions. Most of the dominants are non-native species but purple needlegrass (*Nasella pulchra*), a native species, occurs throughout the park in various densities. It occasionally grows as a dominant on the slopes of San Luis and Los Banos reservoirs. The other dominants include ripgut brome , hare barley (*Hordeum murinum* ssp. *leporinum*), wild oats (*Avena* sp.), and Italian ryegrass (*Lolium multiflorum*). Various species of tarweeds also occur in various densities ranging from low to high in the grassland. They also occur as dominant or subdominant species of small areas. The species of tarweeds are Fitch's spikeweed, common spikeweed (*Hemizonia pungens*), and San Joaquin tarweed (*Holocarpha obconica*). Big tarweed (*Blepharizonia plumosa* ssp. *viscida*) occasionally occurs in the grassland and vinegar weed (*Trichostemma lanceolatum*) often occurs as a subdominant in the grassland.

Some portions of the grassland are dominated by native species of grass. Often these native areas are correlated with sloping areas and shallow soil. Natives such as pine bluegrass often grow beside the California sagebrush scrub on the slopes of Los Banos Reservoir. Creeping wildrye, a native species, can dominate moist areas.

Ruderal

Ruderal vegetation consists of non-native species of plants. It is commonly associated with herbaceous species but the non-native salt cedar will also be discussed here. The ruderal vegetation occurs in disturbed areas such as campground and picnic areas. It also occurs at the edge of the reservoirs.

Herbaceous Species. The most common ruderal species are broad-leaved pepper-grass, cocklebur, spiny clot-bur, yellow star-thistle (***Centaurea solstitialis***), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Picris echioides*), and short-pod mustard (*Hirschfeldia incana*). The broad-leaved pepper-grass, cocklebur, spiny clot-bur, and bristly ox-tongue occur within or at the edge of wetlands, often at the edge of the reservoirs. Yellow star-thistle, Italian thistle, and short-pod mustard occur in drier areas.

Woody Species. Salt cedar grows abundantly at Los Banos Reservoir often in dense thickets at the edge of the reservoir and often adjacent to the riparian vegetation. It also occurs as an occasional plant in the black willow riparian woodland along Los Banos Creek. Two individual salt cedar plants were observed along the shore of O'Neill Forebay.

APPENDIX D

SAN LUIS RESERVOIR LOW POINT IMPROVEMENT STUDY ALTERNATIVES ANALYSIS

Table D-1
Low Point Improvement Project Comparative Analysis

LOW POINT STUDY ALTERNATIVES (1)	POTENTIAL EFFECTS ON SAN LUIS RESERVOIR SRA RESOURCE MANAGEMENT PLAN/PRELIMINARY GENERAL PLAN ALTERNATIVES (3)		
	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Algae Management [all temporary and permanent facilities located in and around the existing quarry and Basalt Use Area [Reclamation owned, DWR / DPR managed] (3)			
Permanent: Algae drying beds (40 acres) [within and around quarry area]	Public access to the quarry area may be affected / limited by algae beds (physical location may preclude development of recreational facilities; alteration of scenic view, depending on the timing)	Proposed multi-use trail (linking Pacheco SP / Basalt Use Area) may be affected by algae beds (depending on the location; alteration of scenic view from public trail (depending on timing)	May affect scenic view (depending on topography and location)
Permanent: Land storage and chemicals area (unknown acreage) [within San Luis Reservoir]	Views within the public use quarry area may be affected (depending on timing)	Views from the proposed multi-use trail may be affected (depending on timing)	May affect existing water recreational uses, including scenic view (depending on location)
Permanent: New access road through the quarry area to tie in to existing road near the Boat Ramp	Public access to the quarry area may be affected by new access road (physical location precludes development of recreational facilities)	Proposed multi-use trail and expanded campgrounds may be affected by new access road (depending on location)	May affect existing recreational uses (depending on location)
Temporary: Basalt Boat Ramp and Parking staging (25 acres) [Basalt Use Area]	Temporarily affect existing recreational uses	Proposed multi-use trail and other proposed uses (expanded campgrounds, cycling / fishing activities on dam) may be affected by temporary construction (depending on location)	Temporarily affect existing uses during construction
Disposal (TBD) (4)	Unknown	Unknown	Unknown

Table D-1
Low Point Improvement Project Comparative Analysis

LOW POINT STUDY ALTERNATIVES (1)	POTENTIAL EFFECTS ON SAN LUIS RESERVOIR SRA RESOURCE MANAGEMENT PLAN/PRELIMINARY GENERAL PLAN ALTERNATIVES (3)		
	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Dissolved Air Flotation (DAF) Treatment [all staging areas, besides SR 152 improvements, located in the Dinosaur Point Area; Proposed Pump Station located adjacent to existing plant, adjacent to the Pacheco SP (Reclamation owned, DWR / DPR managed)].			
Permanent: Pacheco Pump Station Area (15 acres); New Pacheco Regulating Tank (3 acres) [around Dinosaur Point Area]	Access to and use of expanded boat launch may be temporarily affected (depending on location and timing)	Access to and use of proposed trail link (between Dinosaur Point and Pacheco SP) may be affected (depending on location and timing). In addition, views from the proposed public trail may be altered (depending on location, topography, and timing)	Access to and use of expanded boat launch may be temporarily affected (depending on location and timing)
Temporary Construction: Dinosaur Point Boat Ramp and Parking Staging (25 acres) [in and around Dinosaur Point Area]	Use of existing or expanded boat launch may be disrupted during construction of staging area (depending on timing)	Existing use of boat ramp affected. Views from the proposed public trail may be altered (depending on location, topography, and timing)	Use of existing or expanded boat launch may be disrupted during construction of staging area (depending on timing)
SR 152 Access and Improvement at Dinosaur Point Road	Access to park may be temporarily affected	Access to park may be temporarily affected	Access to park may be temporarily affected
DAF at Rinconada WTP (5)	No effect	No effect	No effect
DAF at Santa Teresa WTP (5)	No effect	No effect	No effect
DAF for SBCWD and PVWMA (Location TBD) (5)	No effect	No effect	No effect
Disposal (TBD)	Unknown	Unknown	Unknown

Table D-1
Low Point Improvement Project Comparative Analysis

LOW POINT STUDY ALTERNATIVES (1)	POTENTIAL EFFECTS ON SAN LUIS RESERVOIR SRA RESOURCE MANAGEMENT PLAN/PRELIMINARY GENERAL PLAN ALTERNATIVES (3)		
	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Lower San Felipe Intake (6) [Staging areas are located in the Dinosaur Point Area and the Basalt Use Area (Reclamation owned, DWR / DPR managed). The majority of the facilities located within San Luis Reservoir (Reclamation / DWR owned and operated)]			
Temporary: Dinosaur Point Boat Ramp and Existing Tunnel Spoil (10 acres); Gate Shaft Island (Vertical Shaft) (4 acres); Intake Tap Vertical Shaft (8 acres) [in and around Dinosaur Point Area]	Use of existing or expanded boat launch may be disrupted during construction of staging area (depending on timing)	Existing use of boat ramp affected. Views from the proposed public trail may be altered (depending on location, topography, and timing)	Use of existing or expanded boat launch may be disrupted during construction of staging area (depending on timing)
Permanent: 20,000 ft of Tunnel between Existing Intake at Gate Shaft Island) to New Intake Structure – lower San Felipe Intake and installation of new intake structure	May temporarily affect existing water recreational uses during construction	May temporarily affect existing water recreational uses during construction	May temporarily affect existing water recreational uses during construction
Temporary: Staging Area (Boat Ramp and Parking) at Basalt (10 acres)	Use of existing boat launch may be temporarily disrupted	Proposed uses (reconfigure / add campgrounds, cycling / fishing on dam, RV loop) may be affected (depending on locations)	Use of existing boat launch may be temporarily disrupted
SR 152 access and Improvement at Dinosaur Point Road	Access to park may be temporarily affected	Access to park may be temporarily affected	Access to park may be temporarily affected
SRSR 152 access and improvement at Gonzaga Road	Access to park may be temporarily affected, especially with the proposed rerouting of traffic from existing access road to Gonzaga Road, and recommended improvements nearby on SR 152 (depending on timing)	Access to park may be temporarily affected, especially with the proposed rerouting of traffic from existing access road to Gonzaga Road, and recommended improvements nearby on SR 152 (depending on timing)	Access to park may be temporarily affected, especially with the proposed rerouting of traffic from existing access road to Gonzaga Road, and recommended improvements nearby on SR 152 (depending on timing)
Disposal (TBD)	Unknown	Unknown	Unknown

Table D-1
Low Point Improvement Project Comparative Analysis

LOW POINT STUDY ALTERNATIVES (1)	POTENTIAL EFFECTS ON SAN LUIS RESERVOIR SRA RESOURCE MANAGEMENT PLAN/PRELIMINARY GENERAL PLAN ALTERNATIVES (3)		
	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Bypass San Luis Reservoir (6) [proposed facilities located in and around the Dinosaur Point Area (Reclamation owned, DWR / DPR), in the Lower Cottonwood Wildlife Area (DFG owned / managed), O'Neill Forebay Wildlife Area (Reclamation owned and DFG managed), and within the San Luis Reservoir (Reclamation / DWR owned / managed).			
Permanent: New Pacheco Regulating Tank (3 acres) [near Dinosaur Point Area]	Access to and use of expanded boat launch may be temporarily affected (depending on location and timing)	Access to and use of proposed trail link (between Dinosaur Point and Pacheco SP) may be affected (depending on location and timing). In addition, views from the proposed public trail may be altered (depending on location, topography, and timing)	Access to and use of expanded boat launch may be temporarily affected (depending on location and timing)
Temporary: Dinosaur Boat Launch / parking (15 acres); staging tunnel spoil (10 acres) [in and around Dinosaur Point Area]	Use of existing or expanded boat launch may be disrupted during construction of staging area (depending on timing)	Existing use of boat ramp affected. Views from the proposed public trail may be altered (depending on location, topography, and timing)	Use of existing or expanded boat launch may be disrupted during construction of staging area (depending on timing)
Permanent: Underwater pipeline (15 acres for construction) [in San Luis Reservoir]	Use of existing or expanded boat launch may be disrupted during construction of staging area (depending on timing)	Existing use of boat ramp affected. Views from the proposed public trail may be altered (depending on location, topography, and timing)	Use of existing or expanded boat launch may be disrupted during construction of staging area (depending on timing)
Beach Staging (unknown acreage) [between San Luis Reservoir and Cottonwood Wildlife Area]	May temporarily affect existing recreational uses	May temporarily affect existing recreational uses	May temporarily affect existing recreational uses
Temporary: Tunnel portals and staging (2 acres) [adjacent to San Luis Reservoir and around Lower Cottonwood Wildlife Area]	May temporarily affect recreational uses (hunting) and proposed access into Wildlife Area (depending on location and timing)	May temporarily affect recreational uses (hunting) (depending on timing)	May temporarily affect recreational uses (hunting) (depending on timing)

Table D-1
Low Point Improvement Project Comparative Analysis

LOW POINT STUDY ALTERNATIVES (1)	POTENTIAL EFFECTS ON SAN LUIS RESERVOIR SRA RESOURCE MANAGEMENT PLAN/PRELIMINARY GENERAL PLAN ALTERNATIVES (3)		
	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Permanent: Tunnel; Overland Pipeline (buried - 250 feet corridor for construction) [in Cottonwood Wildlife Area]	May temporarily affect recreational uses (hunting) and proposed access into Wildlife Area (depending on location and timing)	May temporarily affect recreational uses (hunting) (depending on timing)	May temporarily affect recreational uses (hunting) (depending on timing)
Temporary: 3.5 acres Bypass Pump Station (Staging) [Joint Area / O'Neill Wildlife Area]	May temporarily affect recreational uses in the Joint Use / O'Neill Wildlife Area (depending on timing)	May temporarily affect recreational uses in the Joint Use / O'Neill Wildlife Area (depending on timing)	May temporarily affect recreational uses in the Joint Use / O'Neill Wildlife Area (depending on timing)
Permanent: Bypass Pump Station (3.5 acres) [Joint Area / O'Neill Wildlife Area]	May temporarily affect recreational uses in the Joint Use / O'Neill Wildlife Area (depending on timing)	May temporarily affect recreational uses in the Joint Use / O'Neill Wildlife Area (depending on timing)	May temporarily affect recreational uses in the Joint Use / O'Neill Wildlife Area (depending on timing)
Permanent: Forebay Tunnel (O'Neill Forebay) and overland pipeline	May temporarily affect recreational uses in the O'Neill Forebay	May temporarily affect recreational uses in the O'Neill Forebay	May temporarily affect recreational uses in the O'Neill Forebay
Temporary: SR 152 Access and Improvement at Dinosaur Point Road (7)	Access to park may be temporarily affected	Access to park may be temporarily affected	Access to park may be temporarily affected
Permanent: SR 132 Access and Improvement near San Luis Forebay	Access to park may be temporarily affected	Access to park may be temporarily affected	Access to park may be temporarily affected
Disposal (TBD)	Unknown	Unknown	Unknown
Expand Pacheco Reservoir [Proposed facility located adjacent to existing Regulating Tank, within San Luis SRA, adjacent to Pacheco SP]			
New Pacheco Regulating Tank adjacent to existing Pumping Plant and Regulating Tank (Dinosaur Point Road area)	Access to and use of expanded boat launch may be temporarily affected (depending on location and timing)	Access to and use of proposed trail link (between Dinosaur Point and Pacheco SP) may be affected (depending on location and timing). In addition, views from the proposed, public trail may be altered (depending on location, topography, and timing)	Access to and use of expanded boat launch may be temporarily affected (depending on location and timing)

Table D-1
Low Point Improvement Project Comparative Analysis

LOW POINT STUDY ALTERNATIVES (1)	POTENTIAL EFFECTS ON SAN LUIS RESERVOIR SRA RESOURCE MANAGEMENT PLAN/PRELIMINARY GENERAL PLAN ALTERNATIVES (3)		
	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Expand Pacheco Lake	No Effect	No Effect	No Effect
Disposal (TBD)	Unknown	Unknown	Unknown
Combination Project (8)			
Not Determined	Unknown	Unknown	Unknown
No Project / No Action			
No improvements	No effect	No effect	No effect

1 The June 2003 Santa Clara Valley Water District Low Point Improvement Project Draft Alternatives Screening Report (prepared by MWH and Jones & Stokes) summarizes the low-point problem, the alternatives development and screening process conducted to date, and information on the outreach process. It provides seven (7) feasible alternatives recommended for further consideration. The details of each alternative have not been developed. The general components of the Low Point Improvement Project Alternatives identified above are extracted from Figures 1 through 5 (which are currently under development by Montgomery Watson Harza (June 2003). The precise facility locations, components, construction techniques and timing are currently unavailable. As specified in the Draft Alternatives Screening Report, the next steps will be to complete engineering and environmental investigations for the recommended feasible alternatives.

Both the Algae Management and DAF Treatment represent partial solutions. These two alternatives address the water quality aspects of the low-point problem but would need to be combined with other alternatives to meet all the project objectives.

2 For this analysis, potential environmental conflicts are associated with conflicts in the physical location of the project alternative components of the Low Point Improvement Project and the San Luis State Recreation Area General Plan. This table summarizes potential effects resulting from development of the Low-Point Study alternatives on the proposed recreational facilities identified in the San Luis Reservoir General Plan. The extent of such effects would depend primarily on the actual location and timing of the proposed Low-Point alternative elements relative to those of the San Luis Reservoir alternatives. For example, if the Low Point Improvement Project algae beds would be located where a trail would be developed under the San Luis Reservoir General Plan, then a conflict would occur. Also, if the proposed facilities identified in the Low-Point Improvement Project are located within view of proposed recreational facilities, but construction would occur prior to development of the trail, then scenic views would not be affected. This evaluation provides a general analysis of possible conflicts and effects but would need confirmation upon siting of the proposed alternative elements. Please note that many of the alternatives are located within the San Luis Reservoir General Plan, and potential conflicts would occur both to existing as well as future uses. Effects on existing recreational uses are mentioned, but not elaborated upon. Construction / operation of the Low-Point Study Improvement would result in potential impacts to the physical environment (biological resources, water quality degradation, etc.), which will be evaluated as part of SCVWD's Low Point Improvement Project EIR, and therefore are not discussed in this table.

3 The location of the proposed facilities is provided in brackets.

4 The disposal method for the harvested algae material has not been determined.

5 The number of DAF treatment sites will depend on the feasibility of a centralized or a decentralized approach, which will be established during engineering studies.

6 The Southerly Bypass Corridor Alternative was split into two alternatives: The Lower San Felipe Intake Alternative and the Bypass San Luis Reservoir Alternatives.

7 SR 152 Access and Improvements are considered temporary for this alternative, rather than a permanent feature.

8 A combination solution could be formulated by combining feasible alternatives, institutional agreements, reoperation of existing facilities, and other regional projects such as the Los Vaqueros Reservoir expansion and options from the SBCWD and PVWMA basin management plans. The environmental effects on the San Luis State Recreation Area General Plan alternatives would depend on the elements selected for combination.

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APPENDIX E
PUBLIC INVOLVEMENT PROGRAM

Item 1 Notice of Intent & Notice of Preparation

Item 2 Newsletter 1

Item 3 Scoping Meeting 1 Summary and Agenda

Item 4 Scoping Meeting 2 Summary and Agenda

Item 5 USFWS Consultation Meeting Agenda

Item 6 Newsletter 2

Item 7 Public Meeting 3 Summary and Agenda

Item 8 Native American Heritage Commission Letter

DEPARTMENT OF THE INTERIOR - NOTICE OF INTENT

Bureau of Reclamation

San Luis Reservoir & Los Banos Creek State Recreation Area (SRA) joint General Plan and Resource Management Plan (GP/RMP), Merced County, California.

Agency: U. S. Bureau of Reclamation (Reclamation) Interior

Action: Notice of Intent to prepare a programmatic Draft Environmental Impact Statement/Environmental Impact Report for the San Luis Reservoir & Los Banos Creek State Recreation Area (SRA) joint General Plan and Resource Management Plan (GP/RMP).

Summary: Pursuant to Section 102(2) (c) of the National Environmental Policy Act (NEPA), Reclamation, in cooperation with the California Department of Parks and Recreation (DPR), proposes to prepare a Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) for the San Luis Reservoir & Los Banos Creek State Recreation Area (SRA) joint General Plan and Resource Management Plan (GP/RMP). A scoping meeting will be conducted to elicit comments on the scope and issues to be addresses in the DEIS/EIR. The date and time for this meeting is noted below.

Lead Agency: United States Department of the Interior
Bureau of Reclamation
South-Central California Area Office
1243 N Street
Fresno, CA 93721-1813
Contact: Dan Holsapple
Phone: (559)487-5409 Fax: (559)487-5397
dholsapple@mp.usbr.gov

and

California Department of Parks and Recreation
Four Rivers District
31426 Gonzaga Road
Gustine, CA 95322
Contact: Dennis Imhoff, CEQA Coordinator
Phone: (209)826-1197 Fax: (209)826-0284
Email: dimho@parks.ca.gov

Project Location: San Luis Reservoir is approximately five miles west of the City of Los Banos, north and south of State Route 152, west if its intersection with Interstate 5, in the County of Merced, California. Los Banos Creek is located just two miles west of the City of Los Banos, south of State Route 152, off Volta Road, just west of Interstate 5.

Comments:
We would like to know the views of interested persons, organizations, and agencies as to the scope and content of the information to be included and analyzed in the DEIS/EIR. Agencies should comment on the elements of the environmental information that are relevant to their statutory responsibilities in connection with the proposed project. Submit written comments on or before February 28, 2003 (Regional Office: INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER). The scoping meeting will be held on:

Saturday, January 11, 2003
10:00 am. – 2:00 pm
California Department of Parks & Recreation
Four Rivers District Office
31426 Gonzaga Road
Gustine, CA, 95322

Reclamation practice is to make comments, including names and home addresses of respondents, available for public review. Individual respondents may request that we withhold their home address from public disclosure, which we will honor to the extent allowable by law. There may also be circumstances in which we would withhold a respondent's identity from public disclosure, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public disclosure in their entirety.

Supplementary Information:
A joint programmatic Draft Environmental Impact Statement and Environmental Impact Report (DEIS/EIR) is being prepared by Reclamation and DPR. DPR will be the Lead Agency for the California Environmental Quality Act (CEQA) and Reclamation will be the Lead Agency for the National Environmental Policy Act (NEPA).

DPR's General Plan Unit, in conjunction with its Four Rivers District office, is in the process of developing a General Plan and EIR for San Luis Reservoir and Los Banos Creek State Recreation Area in accordance with Public Resources Code §5002.2 referencing General Plan guidelines and §21000 et seq. concerning the California Environmental Quality Act (CEQA). The purpose of the General Plan is to guide future development activities and management objectives at the Park. Additionally, pursuant to the Reclamation Recreation Management Act of 1992, Title 28 (P.L. 102-575), the Council on Environmental Quality Regulations (CEQ) (40CFR 1500-08) and Federal Water Project Recreation Act, Reclamation is developing a Resource Management Plan and EIS. The GP and RMP will be a joint document as the agencies are cooperating to engage in a consolidated planning process to solicit agency and stakeholder participation for both efforts simultaneously. The project areas for each plan will vary, based on differences in management and ownership, however there will be common components within the joint Plan.

The San Luis Reservoir and the Los Banos Creek Retention Dam were built in 1965 as part of the Central Valley Improvement Project on lands owned by Reclamation. The lands are jointly managed by the California Department of Water Resources (DWR) and DPR. DPR is responsible for recreation and resource management while DWR manages the water supply

facilities responsible for furnishing approximately 1.25 million acre –feet of water as irrigation to some 600,000 acres.

There are additional tracts of land managed by the California Department of Fish and Game (DFG) in the vicinity of the San Luis Reservoir which were set aside as mitigation lands during the construction thereof. DFG managed lands will not be part of the General Plan and EIR, as DPR does not have management jurisdiction over these lands. The Federally owned lands, managed by DFG will be included in the RMP sections of the plan. The DFG managed lands owned by Reclamation are known as the San Luis Reservoir Wildlife Area and the O'Neill Forebay Wildlife Area.

The objectives of the joint plan are to establish management objectives, guidelines, and actions to be implemented by Reclamation directly, or through its recreation contract with DPR. That will protect the water supply and water quality functions of the reservoirs; protect and enhance natural and cultural resources in the SRA, consistent with Federal law and Reclamation policies and provide recreational opportunities and facilities consistent with the Central Valley Project purposes.

In the addition the GP/RMP is the primary management guideline for defining a framework for resource stewardship, interpretation, facilities, visitor use and services. The joint plan will define an ultimate purpose, vision and intent for management through goal statements, guidelines and broad objectives. The GP/RMP will be a long-term plan that will guide future specific actions at the SRA. Subsequent specific actions will be the subject of future environmental analysis as required.

_____ _____

Frank Michny, Regional Environmental Officer Date

NOTICE OF PREPARATION

To: Responsible and Trustee Agencies, and Office of Planning and Research.

Subject: Notice of Preparation of a Draft Environmental Impact Statement and Environmental Impact Report for the San Luis Reservoir State Recreation Area (SRA) joint General Plan and Resource Management Plan (GP/RMP). The SRA includes the O'Neill Forebay and Los Banos Creek Detention Dam and their adjacent recreation areas.

Lead Agency:

California Department of Parks and Recreation
Four Rivers District
31426 Gonzaga Road
Gustine, CA 95322
Contact: Dennis Imhoff, CEQA Coordinator
Phone: (209)826-1197 Fax: (209)826-0284
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Contact: Dan Holsapple
Phone: (559)487-5409 Fax: (559)487-5397
E-mail: dholsapple@mp.usbr.gov

Consultant:

EDAW, Inc.
150 Chestnut Street
San Francisco, CA 94111
Contact: Donna Plunkett
Phone: (415)433-1484 Fax: (415)788-4875
Email: plunkettd@edaw.com

A joint programmatic Draft Environmental Impact Statement and Environmental Impact Report (DEIS/EIR) is being prepared by the California Department of Parks and Recreation (DPR) and the U. S. Bureau of Reclamation (Reclamation). DPR will be the Lead Agency for the California Environmental Quality Act (CEQA) and Reclamation will be the Lead Agency for the National Environmental Policy Act (NEPA).

We would like to know the views of interested persons, organizations, and agencies as to the scope and content of the information to be included and analyzed in the DEIS/EIR. Agencies should comment on the elements of the environmental information that are relevant to their statutory responsibilities in connection with the proposed project. The project description, location, and potential environmental effects of the proposed project (to the extent known) are contained in this Notice of Preparation (NOP).

Due to the time limits mandated by State law, your response should be sent at the earliest possible date, but not later than January 3, 2003.

Please send your written response to Dennis Imhoff, CEQA Coordinator , California Department of Parks and Recreation, at the address shown above. Responses should include the name of a contact person at your agency.

Project Title: San Luis Reservoir State Recreation Area joint General Plan and Resource Management Plan.

Project Location: San Luis Reservoir and O'Neill Forebay are approximately four miles west of the City of Los Banos, north and south of State Route 152, and west of its intersection with Interstate 5, in the County of Merced, California. Los Banos Creek Detention Dam is located six miles southwest of the City of Los Banos, south of State Route 152, off Canyon Road, and on the west side of Interstate 5. (see attached Project Location Map)

Project Description:

DPR's General Plan Unit, in conjunction with its Four Rivers District office, is in the process of developing a General Plan and EIR for San Luis Reservoir State Recreation Area in accordance with Public Resources Code §5002.2 referencing General Plan guidelines and §21000 et seq. concerning the California Environmental Quality Act (CEQA). The purpose of the General Plan is to guide future development activities and management objectives at the Park. Additionally, pursuant to the Reclamation Recreation Act of 1992, Title 28 (P.L. 102-575) and the Council on Environmental Quality Regulations (CEQ) (40CFR 1500-08), Reclamation is developing a Resource Management Plan and EIS. The GP and RMP will be a joint document as the agencies are cooperating to engage in a consolidated planning process to solicit agency and stakeholder participation for both efforts simultaneously. The project areas for each plan will vary, based on differences in management and ownership, however there will be common components within the joint Plan.

The San Luis Reservoir, O'Neill Forebay and Los Banos Creek Detention Dam were built in 1962 and 1965 as part of the Central Valley Project and the California State Water Project on lands owned by Reclamation. Portions of the lands are jointly managed by the California Department of Water Resources (DWR) and DPR. DPR is responsible for recreation and resource management while DWR manages the water supply facilities responsible for furnishing approximately 1.25 million acre –feet of water as irrigation to various agencies.

There are additional tracts of land managed by the California Department of Fish and Game (DFG) in the vicinity of the San Luis Reservoir that were set aside as mitigation lands during the construction thereof. DFG managed lands will not be part of the General Plan and EIR, as DPR does not have management jurisdiction over these lands. The Federally owned lands, managed by DFG will be included in the RMP sections of the plan. The DFG managed lands owned by Reclamation are known as the San Luis Reservoir Wildlife Area and the O'Neill Forebay Wildlife Area.

Preparation of the joint General Plan and Resource Management Plan is in its early stages, so ultimate land use and resources management provisions or recommendations have not yet been determined. The lead agencies are currently in the process of evaluating existing resources and management opportunities and constraints at the SRA that will aid in the development of the GP/RMP. Known resources at the SRA include:

- Water storage, supply and distribution facilities and infrastructure;
- Plant Communities including Grassland, coastal Sage Scrub and riparian;
- Special-status wildlife species (e.g., San Joaquin kit fox, California red-legged frog);
- Culturally and historically significant areas;
- High-use recreational areas for camping, boating, fishing and swimming (e.g., San Luis Creek, Basalt, Madeiros, Dinosaur Point and Los Banos Creek);

Issues that will be considered as part of the General Plan process include, but are not limited to, the following:

- Expansion of recreational facilities (e.g., improved water system. camping facilities, rest room facilities, expanded swimming area, windsurfing safety patrol platform, marina improvements);
- Significant plant communities and wildlife habitats for San Joaquin kit fox and California red-legged frog, as well as other species of concern;
- Open space/scenic vistas;
- Water and land based recreation and sports including hiking, camping, windsurfing, fishing;
- Evaluation of archaeological/historical/cultural resources;
- Opportunities for transportation and safety improvements;
- Regional growth and planning issues;
- Interpretive and concession opportunities;
- Management constraints with regards to access to Los Banos Creek;
- Relationship to adjacent Pacheco State Park;
- Implications of potential alignments for high-speed rail facilities.

Potential Environmental Effects:

Although ultimate land use and resources management provisions of the GP/RMP have not yet been determined, generally expected types of environmental impacts that may occur as a result of the GP/RMP can be identified. Based on the resource characteristics of the SRA and generally anticipated uses, potential environmental effects that will likely be addressed in the EIS/EIR, include:

- Potential conflicts between sensitive wildlife species/natural communities (e.g., San Joaquin kit fox corridor protection and facility development);

- Potential for development of telecommunications structures (cell towers) on Federally-owned lands affecting ecological and scenic resources;
- Potential for substantial adverse change in the visual character of portions of the project area due to the placement of additional facilities;
- Transportation impacts associated with safety for ingress and egress.

While potential take of threatened and endangered species is not anticipated, the EIR/EIS will describe future State and Federal consultation and permit requirements that may be required for facility development as necessary.

Intended Use of the EIR/EIS:

DPR and the Parks and Recreation Commission and Reclamation will use the EIS/EIR component of the GP/RMP to consider the environmental effects, mitigation measures, and alternatives, when reviewing the proposed Plan for approval. The EIR/EIS will serve as the State's CEQA compliance document for adoption of the General Plan and as Reclamation's NEPA compliance document for adoption of the Resource Management Plan. It will also serve as the programmatic environmental document that may be referenced in implementing future actions included in the GP/RMP. Responsible agencies may also use the EIR as needed for subsequent discretionary actions.

Scoping Meeting:

Saturday, January 11, 2003
10:00 am. – 2:00 pm
Four Rivers District Office
31426 Gonzaga Road
Gustine, CA, 95322

_____ _____

State Parks CEQA Coordinator, Four Rivers District Date

Attachments: NOP Distribution List; Project Location Map

SAN LUIS RESERVOIR & PACHECO PARK GENERAL PLANS

PARTNERS IN PARK PLANNING

In a collaborative partnership, the California Department of Parks and Recreation and U.S. Bureau of Reclamation are launching a joint planning process to improve recreation facilities at the San Luis Reservoir. Working together with the community, this planning process will create a vision for the future, provide recommendations for improvements, and set guidelines for managing the park so it can be enjoyed for years to come. We invite you to join us in planning the park's future!

We welcome your ideas and suggestions for improving this recreation area and preserving its special characteristics. You can start by filing out the enclosed survey and attending the Public Planning Workshop on January 11. Public input will help us focus on priorities, desires and concerns as we evaluate the park's recreational uses and visitor facilities.

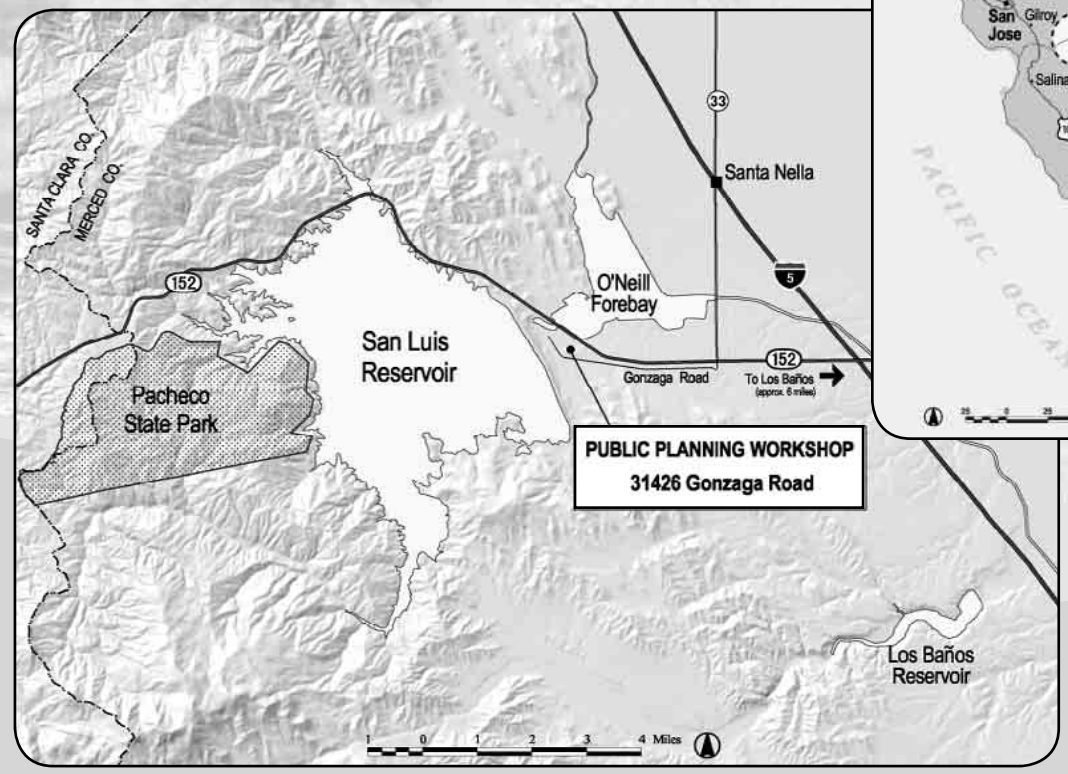
Stewardship of the park's environmental resources will also be an important consideration in the planning process. We look forward to hearing your ideas about ways that we can ensure the long-term protection of the area's wildlife, plants, and cultural resources. Given its proximity to the reservoir, we also will be discussing Pacheco State Park during this planning process. We hope you will take some time to share your ideas and help plan the future of these magnificent state parks.

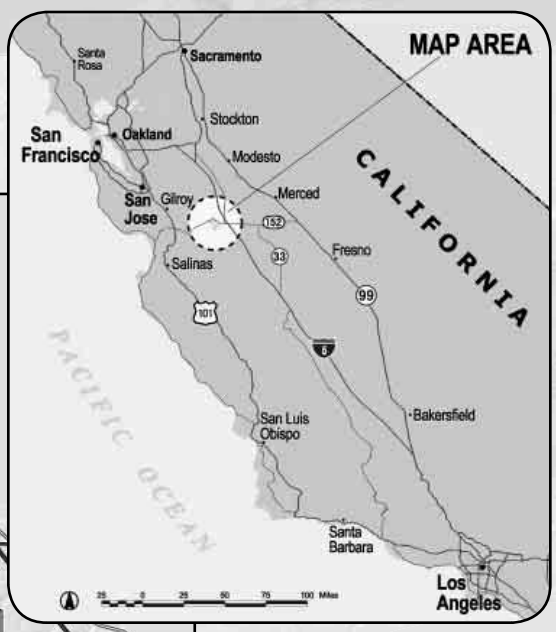
HOW CAN YOU CONTRIBUTE?

Stay Informed: This Planning Update will keep you informed on the progress of the General Plan process. It will cover both the San Luis Reservoir State Recreation Area and Pacheco State Park General Plans, because the parks are adjacent to each other and parts of the planning process will be combined. Over the next year and a half, we'll be working together to discuss and evaluate a variety of planning topics including recreation facilities, habitat protection, and education and interpretive programs, just to name a few. This Planning Update will track our progress and notify you of upcoming public workshops.

Fill Out the Survey: The enclosed survey will help us understand your key issues, ideas and concerns. Tell us what you like about the parks, what's missing, or what could work better!

Attend the Public Planning Workshops: We will host three public workshops for the San Luis Reservoir and Pachecho Park General Plans. The first workshop will be held on January 11 at the San Luis Reservoir. The workshop will provide a forum to discuss suggestions for park enhancements and to identify topics for the planning process to explore. Please join us!





Public Planning Workshop

Saturday, January 11, 2003
10:00 am to 2:00 pm
Four Rivers District Office
31426 Gonzaga Road
Gustine, CA 95322
209.826.1197

San Luis Reservoir

San Luis Reservoir State Recreation Area

This recreation area contains three main water bodies: the San Luis Reservoir, Los Baños Creek Detention Dam, and O'Neill Forebay. These facilities are managed through a joint agreement between the U.S. Bureau of Reclamation and the California Department of Water Resources and supply approximately 1.25 million acre–feet of irrigation water to about 600,000 acres of land. In a 1969 agreement, certain lands surrounding the San Luis Reservoir and Los Baños Detention Dam were designated for recreational use and are currently managed by the California Department of Parks and Recreation.

The San Luis Reservoir is well-known for its windsurfing, fishing, camping and boating opportunities, in addition to other recreational activities. Equally important in the planning process is the area's historic significance, including its early use by Native Americans and later as important lands in California's ranching history.

Los Baños Riparian Corridor

Known resources at the San Luis Reservoir State Recreation Area include:

- Water storage, supply and distribution facilities and infrastructure,
- High-use recreational areas (e.g., San Luis Creek, Basalt, Medeiros, Dinosaur Point and Los Baños Creek),
- Plant communities such as Grassland, Coastal Sage Scrub and Riparian,
- Wildlife species such as San Joaquin kit fox, and
- Culturally and historically significant areas.

Some topics the General Plan process will consider include:

- Expansion of recreational facilities (e.g., camping facilities, restroom facilities, swimming area, windsurfing, safety patrol platform, marina improvements),
- Land management actions for plants and wildlife,
- Interpretation of archaeological/historical/cultural resources,
- Evaluation for access safety improvements,
- Regional growth and planning issues,
- Relationship to adjacent Pacheco State Park, possibly providing a linking trail system, and
- Remote access to Los Baños.

The Los Baños Detention Dam lies approximately 10 miles to the southeast of San Luis Reservoir. The area contains camping and day use areas and also provides boating and fishing opportunities. Both the San Luis and Los Baños areas host many plant and animal species and associated habitats, including some that warrant special management considerations, such as the San Joaquin kit fox, a federal and state endangered species.

Biologists working on the San Luis Reservoir wildlife inventory photographed this coyote at night, using a stationary camera set with infrared transmitters.

PARKS TEAMS WITH BUREAU OF RECLAMATION

The San Luis Reservoir State Recreation Area is unique because although the recreation lands are managed by the California Department of Parks and Recreation, the land is owned by the U.S. Bureau of Reclamation. They have owned the land since building the dam in 1965. The Bureau of Reclamation uses Resource Management Plans in the same way that California State Parks uses General Plans. The two agencies are working together to produce a joint plan to consolidate certain facets of the planning process. Your voice and/or written comments will be heard by both state and federal agency staff – so your participation in this process is doubly important!

A joint Environmental Impact Report / Environmental Impact Statement (EIR/EIS) also will be produce as part of this planning process, providing an opportunity to plan for the future of the San Luis Reservoir recreation lands, while respecting their role as habitat and water distribution facilities.

Pacheco Park

Pacheco State Park

Scenic Rolling Hills of Pacheco State Park

The approximately 6,800 acres of Pacheco State Park were donated to the State of California by the late Paula Fatjo, a descendant of Francisco Pacheco. Currently, 2,600 acres are open to the public, principally for hiking and horseback riding. These lands were part of the larger 48,000-acre Mexican land grant deeded to Pacheco in 1843. The original adobe structure built by the Pacheco family was moved during the construction of the San Luis Reservoir and sits amidst the other ranch buildings, paddocks and outbuildings that exist today. The park is adjacent to the San Luis Reservoir on the east and is accessible off Dinosaur Point Road from State Route 152 in western Merced County.

PACHECO RESOURCES

Pacheco Park is located in the Diablo range at the edge of the Central San Joaquin Valley rising from 650 feet to its highest peak at 1,900 feet above sea level. Pacheco's scenic rolling hills are a result of coastal and valley influences resulting in a mosaic of oak and blue oak woodland, open grassland and wildflowers. The hills are laced with a myriad of old ranch roads. Deer, bobcat, mountain lion, coyote, fox and eagles are among its diverse wildlife. Approximately 25 small reservoirs, originally created as livestock watering ponds, now capture and store water runoff.

Pacheco State Park resources include:

- Hiking and equestrian trails,
- Historical/cultural resources, including old ranch buildings and corrals,
- Plant communities such as oak and blue oak woodland,
- Wildlife species, such as the California red-legged frog,
- Open space, and
- Scenic vistas.

Some topics that will be considered in the General Plan process include:

- Access safety on State Route 152,
- Opportunities for overnight camping, horseback riding, and other recreational activities,
- Opportunities for interpretive and educational programs,
- Relationship to the adjacent San Luis Reservoir State Recreation Area,
- Historical/cultural resources including old ranch buildings and corrals,
- Facilities analysis, including use of existing buildings, and
- Evaluation and inventory of historic and cultural resources.

Paula Fatjo bequeathed the property in her will for the "protection, maintenance and fostering of natural flora and fauna." Therefore, this site's recreation use is more passive in nature than at San Luis and is predominantly used by equestrians and hikers. Several ridges have been leased for energy production and contain large wind turbines which currently generate 22.3 million kilowatts of energy annually. Areas of the park outside of the wind turbine lands are leased for cattle grazing. The property's historic features, in addition to the Fatjo ranch, include an old line shack used by Henry Miller's cattle company in the 1800s and part of the Butterfield Stage line route. Other areas are known to be rich in archaeological resources.

This park is separate from San Luis Reservoir, and a General Plan has never been prepared for it before. The planning process will coordinate the work for these two areas while still recognizing their differences. The General Plan process will be an opportunity to plan for the future of the sites' historical and natural resources, while exploring ways to enhance recreational use of the property.

Historic corrals characterize the Fatjo ranch

California Department of Parks and Recreation
Four Rivers District
31426 Gonzaga Road
Gustine, CA 95322

SAN LUIS RESERVOIR • PACHECO STATE PARK

Calendar of Events

GENERAL PLAN PROCESS AT A GLANCE

FALL 2002	WINTER 2003	SPRING/SUMMER 2003	FALL 2003	SPRING 2004
Information Gathering Fieldwork	Summarize Existing Conditions PUBLIC PLANNING WORKSHOP #1	Discuss Opportunities & Constraints and Develop Plan Alternatives PUBLIC PLANNING WORKSHOP#2 Prepare Draft Plans	PUBLIC PLANNING WORKSHOP #3 Public Review of Draft Plans & EIR/EIS	Distribute Final Plans & EIR/EIS Agency Approvals

PARTICIPATION IS THE KEY TO A GREAT PLAN!

Contact Information

If you are not currently on our mailing list and would like to receive the planning update and notice about future workshops, or wish to send written comments, please contact us at:

California Department of Parks and Recreation
Four Rivers District
31426 Gonzaga Road
Gustine, CA 95322
209.826.1197
(for questions or comments about the General Plan Process)

For general information about park use
(e.g. hours, activities), please call: 1-800-346-2711

Visit Our Website
www.cal-parks.ca.gov

Printed on recycled paper.

Design by
EDAW

San Luis Reservoir
State Recreation Area
General Plan / Resource Management Plan
SURVEY

(please mail back by January 3, 2003)

Your Name: _____

Organization (if any): _____

Address: _____

City, State, Zip: _____

Phone (optional): _____

E-mail (optional): _____

	Yes	No
Would you like to remain on our mailing list to receive future Planning Updates?	☐	☐

How often do you visit the San Luis Reservoir? _____

How far do you travel to get there? (miles) _____

What activities do you like to do there? _____

What do you value most about the San Luis Reservoir? _____

What do you like the least? _____

What facilities need improvements or additions at the Park? _____

When you last left the park, what did you remember the most? _____

_____

_____

Are there any environmental issues that you think we should pay close attention to during preparation of the General Plan and Environmental Impact Report? _____

_____

_____

_____

_____

Have you ever been to the Los Baños Creek area? What did you do there? _____

_____

Is there anything else that you would like to share with us? _____

_____

please fold in thirds

tape it closed, affix a 37 cent stamp and mail by January 3, 2003 Thank you!

requires 37 cent stamp

California State Parks
Four Rivers District Office - Attn: Dennis Inhoff
31426 Gonzaga Road
Gustine, CA 95322

GENERAL PLAN/RESOURCE MANAGEMENT PLAN and EIR/EIS

SCOPING MEETING

FOR
SAN LUIS RESERVOIR STATE RECREATION AREA
AND
PACHECO STATE PARK
January 11, 2003
Four Rivers District Headquarters

MEETING SUMMARY
Issue Date: February 21, 2003

Participants

Robert Epperson, RMP Coordinator, USBR
Dan Holsapple, Resource Management Specialist, USBR
Ricardo Cortesa, USBR
Donna Plunkett, Project Manager, EDAW
Corrina Kweskin, Project Planner, EDAW
Ian Ferguson, Project Planner, EDAW
Leo Edson, Wildlife Biologist, EDAW
Wayne Woodroof, Statewide Coordinator, DPR
Warren Wulzen, Associate State Archaeologist, DPR
Dave Gould, Chief Ranger, DPR
Mary Stokes, Interpretive Specialist, DPR
Dennis Imhoff, Chief Ranger, DPR
Dave Milam, Ranger, DPR
Lee Sencenbaugh, DPR
Steve Skram, DPR
Curtis Climer, DPR
Michael Mulligan, Compliance Specialist, DFG
Daniel Applebee, DFG
Tom Young, DWR
Mandeep Bling, DWR
Julie Vance, DWR
Cheryl Johnson, Caltrans/USFWS
John Fulton, USFWS
Robert King, Merced County Planning Dept.
Lynn Hurley, SCVWD
Frances Mizuno, "SLDMWA"
Clyde Strickler, Retired DPR Superintendent
Steve Pearl, Wild Fro Racing
Sam Halsted, Landowner
George Stricker
Bruce Hochuli, SLSPP
George Ground, SLSPP
Vern Masse

The meeting began at approximately 10:00am. The agenda follows the summary below. *Public comments are indicated in italics.* Two poster maps were on display: "Sensitive Biological Species" and "Existing Conditions." In addition, the following handouts were distributed:

1. Agenda
2. General Plan Table of Contents
3. San Luis Reservoir Resource Inventory (January 1973)

4. San Luis SRA Preliminary Scoping Document (11/20/01)
5. San Luis Reservoir SRA General Plan and RMP EIR/EIS Notice of Preparation (11/22/02)
6. Pacheco SP Preliminary Scoping Document (11/2001)
7. Fatjo Project Resource Summary (May 1996)
8. Pacheco State Park General Plan/EIR Notice of Preparation (11/22/02)
9. Contact List
10. California State Parks Planning Handbook Pages 29-37 (February 2002)

Sign-In and Introduction

Dave Gould provided a team overview, introducing the team members that were present from the various agencies. Dennis Imhoff provided an overview of the General Plan process. The current General Plan on file for San Luis Reservoir SRA is from 1971, with a 1985 amendment. There is no General Plan on file for Pacheco State Park since it is a relatively new addition to the State Parks system. The ultimate goal of the General Plan process is a "broad brush" look at desired facilities and resources. The General Plan is scheduled to be completed by April/May 2004. Dennis also discussed the use of planning consultants for completing the General Plan work and introduced EDAW team members for the subject park units.

Planning Process Overview & Public Participation

Donna Plunkett from EDAW thanked everyone for attending and provided an overview of the General Plan process and EDAW's role as the consultant. She described that there are two separate processes for the General Plan/RMP and for the EIR/EIS and that there will be a separate Plan for Pacheco and San Luis Plan The latter will be joint effort of DPR and Reclamation. She also described the difference between a State Park and a State Recreation Area. She referenced the State Parks Planning Handbook and distributed the section on the planning process. EDAW is currently putting together the existing conditions, noting that this a particularly appropriate time to get feedback on maps and other data. This meeting is also considered a formal scoping meeting and comments made at this meeting will become part of the formal CEQA/NEPA record.

The next step in the process will be to develop alternatives over the next few months with the goal of a preferred alternative by summer of this year. The San Luis Reservoir State Recreation Area General Plan and the Pacheco State Park General Plan currently are on a joint track but they may diverge since the San Luis Reservoir State Recreation Area General Plan also needs to comply with NEPA and this make take more time. It was noted that there will be two other public workshops and opportunities for public comment. It was also noted that the EIR for Pacheco and the EIR/EIS for San Luis will be program level analysis and that future projects implemented as part of this process may require a project level analysis.

Vern Massy asked whether the O'Neill Forebay water levels would be addressed at this level. Donna replied that desired water levels and seasonal recommendations could be included. Bob Epperson commented that the Reclamation's primary goal for the project is to collect and distribute water. Recreation is a secondary use and, therefore, will not have as much influence on water level recommendations. However, USBR will entertain concerns. *Bruce Hochuli asked*

whether water supply goals for CVP users and increased water levels were mutually exclusive. Bob responded that they may or may not be mutually exclusive, depending on how much water was available at different times of the year. The water levels will be affected by the operating contracts. Wayne Woodroof commented that this planning process is an opportunity to look at these conflicting goals and uses to see whether they can be brought together. Bob added that they have made some minor changes in the way that flows are released at Millerton.

Steve Pearl asked whether the primary goal of the planning process is top ascertain the highest use value and had this been decided already. It was noted that the planning process is not about determining highest use however, it is an opportunity to try to balance and reconcile conflicting issues about uses. Mandeep Bling, DWR, operates and maintains the SLR project. He reiterated that the primary purpose of the project is to distribute water to consumers through existing contracts that they hold. Every effort is made to minimize fluctuations of water levels at the O'Neill Forebay. For example, most of the water level reduction occurs at night, as this also helps to reduce energy costs. Clyde Strickler added that USBR and DWR have always worked closely with DPR to resolve fluctuation issues as much as is possible.

Project Overview

Pacheco State Park

Dave Milam provided an overview of the general history of Pacheco State Park, including the funding structure which is unique for this park. The property was bequeathed in the will of Paula Fatjo and a separate fund is used to pay for the operations at the Park. *Tom Young suggested that the fees at Pacheco could be reduced because there is a separate fund set up to support the Park. Steve Pearl asked whether Pacheco is open to ATV vehicles. Dave Milam responded that they are not allowed, although sometimes they are used by ranchers and rangers.*

Dave Gould provided an overview of the recreational aspects of Pacheco. The eastern half of the Park is closed to public use except for guided tours. The western half is open to day use activities including hiking, biking, horseback riding, and camping with a special event permit. Mary Stokes provided an overview of the interpretive uses at Pacheco. Currently there are freestanding outdoor exhibits, guided tours, and limited maps. Mary distributed a handout describing the main interpretive stories currently offered at Pacheco and asked for feedback on the content of the stories they are telling about the Park.

Leo Edson gave an overview of the biological resources at Pacheco, noting that the existing ponds are host to the California red-legged frog, a Federally endangered species based on reconnaissance level surveys that took place last fall. He noted that survey work was limited for the property so a full wildlife and vegetation inventory does not exist.

Warren Wulzen described the cultural resources. Pacheco was partially surveyed when it was made a State Park. It contains 10 cultural resource sites, 8 of which are Native American sites with bedrock millings and/or middens. The redwood picket fencelines along the base of the Park and through the center are historic resources. Paula Fatjo left a collection of artifacts at the ranch, including books and saddles, which are a rich source of ranching and family history. Currently, DPR is putting out a contract to develop recommendations for how best to preserve the adobe in its present condition.

San Luis Reservoir State Recreation Area

Bob Epperson provided an overview of the general history of the San Luis Reservoir project, including the Santa Clara-Pacheco conduit. *Dan Applebee asked why land was purchased in excess of what was needed for the reservoir.* Bob responded that excess land was purchased for several reasons. First, purchased land included the basalt rock quarry that was used to build the dam. Second, flood prone areas were purchased. Third, in cases where landowners were not willing to sell, land was acquired through condemnation proceedings. In the latter case, excess lands have been used as mitigation areas such as the DFG managed wildlife areas in the vicinity of the SRA. *John Fulton asked for clarification on the areas indicated in light and dark yellow on the map.* Bob responded that all ofthese areas are managed by DFG however the lighter areas are federally owned and the darker areas are also owned by DFG.

Dave Gould provided an overview of the recreational resources of San Luis Reservoir SRA. It includes 26,000 acres. The Basalt use area is developed with 79 campsites and sewage dump stations. It is popular for striped bass fishing. The Dinosaur Point use area has a boat launch ramp for fisherman and is used by jet-skiers. The O'Neill Forebay's is the most developed of the reservoirs. It has the San Luis Creek use area with 149 developed picnic sites and a boat launch ramp. It has a swimming area and group camping facility which can accommodate 100 people. The Medeiros uses area is on the undeveloped side of the O'Neill Forebay. It has 60 primitive campsites, 49 ramadas, and a day use facility. It also has a boat launch which has been closed since 9/11. This is the area that the windsurfers launch. Los Banos Creek is primitive with a small campground with 15 sites, a boat launch facility, and a small picnic area. The boat limit is 5 mph or "no wake". This area is good for black bass and also popular for remote control model planes. The SRA has a total of 206 developed campsites. A new addition to recreational opportunities is Steve Pearl's "street luge" program on Dinosaur Point Road. *Bruch Huchul questioned whether the gates at the boat launch at the Medeiros use area provided increased security.* Dave responded that the gates prevent people from launching boats in the evening when no one is patrolling the area. This also helps reduce the risks associated with higher nighttime winds.

Dan Applebee asked about current hunting levels. Dave responded that at O'Neill Forebay and San Luis Reservoir only open season waterfowl hunting is allowed. This is not very popular in this area. There are also a few scull boats on O'Neill and fewer on San Luis Reservoir. *Ricardo Cortesa asked about opportunities for equestrians.* Dave responded that there is one horse camp at the Los Banos Reservoir. *Dan Applebee asked about limits on jet-skis.* Dave responded that there are no limits.

Bruce Huchul asked about bicycling opportunities because windsurfers like to use a bicycle to launch when there is no wind. Bruce asked why the dam had been closed to bicyclists since 9/11. In addition, restrictions at the O'Neill Pumping Plant prevent a continuous bike loop around the reservoirs. Dave responded that the California Aqueduct is a designated bike route and one can still walk across the dam. *Bruce questioned the distinction between bicyclists and hikers. Mandeep responded that closing the route across the dam was part of Reclamation's security assessment.* Dave said that the concern was that bicyclists can pull large ice chests on their bicycles, which are a security threat. *Tom Young added that in the 80s, DWR was sued for millions by someone who fell off of their bike on DWR property and became a quadrapalegic.*

As a result, DWR hired a consultant to determine which areas were appropriately maintained for bicycle use.

The south end of the O'Neill Forebay is closed to bicyclists because it is not appropriately maintained. Bruce responded that mountain biking can be done on very primitive trails. George Ground, SLSSP added that courts are starting to reverse these types of decisions. For example, they are allowing skateboards. Bob King, Merced County Planning, said that laws are starting to address liability issues as long as certain steps are followed. John Fulton thought that bicycle restrictions should be at the top of the Los Banos Creek area, not the bottom. Bruce Huchul brought up a concern about powerlines since many windsurfers are also kite flyers. Steve Pearl discussed the potential for gravity sports at the Dinosaur Point Road area. Dave did not see a conflict between these sports and uses at either Pacheco State Park or San Luis Reservoir.

Mary Stokes provided an overview of the interpretive resources at San Luis Reservoir SRA. There is the Romero Visitors Center, Basalt Campground activities, and informal weather station at the O'Neill Forebay. Mary distributed a handout describing the main interpretive stories currently offered at San Luis and asked for feedback on the content of those stories.

Leo Edson described the potential sensitive biological resources within the SRA, including the California red legged frog, San Joaquin kit fox, tri-colored blackbird, tiger salamander, and burrowing owl. *Julie Vance asked whether kit fox surveys would be conducted at either Pacheco or San Luis.* Leo responded that there are no planned surveys. *Robert King asked about the relationship between the General Plan process and the USFWS HCP process and whether Pacheco State Park or the San Luis Reservoir would consider providing kit fox corridors.* Leo responded that the General Plan team will be working with USFWS to preserve existing corridors but that the team has not yet considered formally becoming part of the HCP process. Donna added that the planning team will consult with the USFWS and that Joanne Karlton of State Parks is working closely on the HCP and the kit fox corridor. *Robert King added that Merced County would like to see State Parks partnering with the County on the HCP.* Leo thought this would be a logical partnership. Bob Epperson added that Reclamation has been looking to acquire land in the area to facilitate the HCP process.

Warren Wulzen described the cultural resources at the San Luis Reservoir SRA. Forty-eight Native American sites have been recorded along the upper level of the San Luis Reservoir while 32 were within the reservoir area. Five were destroyed or inundated and 24 are below the top pool so they are flooded part of the year. One of the sites is on the O'Neill Forebay. Ten sites have been recorded at the Los Banos Reservoir. DPR needs to treat the SRA sites differently than those at Pacheco because the SLR is federally owned and therefore subject to NEPA Section 106 requirements. Warren also described that the historic resources of the dam and the quarry could help interpret the construction of the California Water Project. There are no paleontological resources, despite the name Dinosaur Point, although a few mastodon tusks were found during construction, as well as some early marine shell deposits.

Open House

Lunch was provided and all participants had an opportunity to mingle and ask individual questions.

Presentations

It was suggested that some of the groups and individuals present might want to give an overview of how they use the facilities and state any recommendations or requests that they may have.

Bruce Hochuli, San Luis Sailboarders Safety Patrol (SLSSP)

The San Luis Reservoir area is popular because of great wind, water, and vehicular access. Because of prevailing westerly winds, the majority of the windsurfers use the Medeiros use area of the O'Neill Forebay. An occasional north wind attracts people to launch from Checkpoint 12. The primary concerns are:

1. Leave parking near the water; it is good the way it is.
2. The submerged pipe near Medeiros has caused several injuries; windsurfers would like to see it covered or removed.
3. Water levels on O'Neill Forebay should be maintained at a higher level. 219 is the minimum that windsurfers can tolerate, particularly at "Catfish Flats" along the southwestern part of the O'Neill Forebay.
4. Automated water level information would help inform windsurfers of when to use the area.
5. The 10 mph speed limit should be marked near the main windsurfing area. Currently it is marked only at the boat launching area.
6. The jetski launch area is difficult to use and it would help to have a good ramp.

The SLSSP represents windsurfers and also bicycle riders and kayakers because these provide alternate sporting opportunities when there is no wind. Part of the SLSSP goal is to provide unofficial guidance regarding unique local conditions. For example, SLSSP will warn new users about the overgrown weeds in August when water levels are low.

Steve Pearl asked whether dredging could be used to achieve higher water levels.

George Ground commented that there would be no issue if the ridges could be knocked down. SLSSP would be happy to help identify the high points in the ridges. Currently they place buoys on the ridges to warn windsurfers.

Tom Young mentioned that the minimum USGS water level currently is 217. Mandeep said that this is not the operational level. Bruce said that they have seen the water levels go as low as 216. Tom Young replied that levels have only once or twice gotten as low as 217.5 for a twelve hour period. Bruce said that currently water levels are lowest in the morning, which is a preferred time for windsurfers because winds are higher. Tom said that the "glory hole" is maintained at 225. Bruce stated that currently there is no way for windsurfers to know the water level until they arrive at the site. Tom stated there is a water level recorder which could transfer water level information to the California Data Exchange (CDEC), which could possibly put the information on the internet.

Los Banos Reservoir is currently online and updates every three hours. Bruce said it would be great if they could get the O'Neill Forebay water levels online. In addition, they would really like

to see fluctuations around plus or minus 220 instead of plus or minus 219. In addition to causing problems for windsurfers, power boats run aground. A viewing platform is not a high priority for windsurfers since they are usually already out in the water.

Steve Pearl, Wild Fro Racing, LLC

Steve Pearl represents street luging on Dinosaur Point Road, a world class recreational street luge road at about 2.5 miles long. He described the tremendous potential for gravity and adrenaline sports. His primary interest is to increase the "technical" nature of the road and to provide some increased level of road control to keep cars off of it while riders are using it.

Sam Halsted, adjacent landowner and rancher

Sam expressed concern that more of the ranchers did not show up for the meeting. He has sold off lots 40 acres and larger, except for a few small lots along Dinosaur Point Road. He is interested in maintaining open space. He described a problem where Whiskey Flat Road and Fifield Road split a ranch, the 12,000 acre Mathis Ranch and the 5,000 acre Sherrer Ranch. Whiskey Flat Road served as the only access for some ranchers with 80 foot right-of-way to drive cattle. Sam is concerned about the future uses proposed along Whiskey Flat Road, especially if parking or other uses are allowed. .

Bob Edminster just completed a biological study regarding the pig problem. Sam is interested in what State Parks could do to help get rid of the pigs. Dave Gould agrees about tremendous damage caused by pigs. State Parks has been getting depredation permits from DFG. As an example, State Parks hired a pig trapper for Henry Coe State Park who caught 750 pigs in three months. State Parks would like to do the same thing at Pacheco.

Sam is also interested in the financial aspects of running Pacheco State Park, whether some general fund money was coming into the Park, and how projects will be funded. For example, he wondered whether wind farming would be increased. Dave Gould responded that Paul Fatjo's will required that all money generated from the Park goes to run it. The contract with PG&E dropped rates when they went to market rate four years ago. The Fatjo Corporation funds Dave Milam and Curtis Climer's positions. Pacheco State Park is self supporting.

Tom Young, DWR Operational Issues

The San Luis Reservoir is a joint use operation between the State Water Project and the Central Valley Water Project. The State Water Project has 28 contracts. "Banks" feeds the California Aqueduct. The Tracy Pumping Plant is feeding the Delta-Mendota federal aqueduct. The San Luis Reservoir project currently is 55% federally operated and 45% state operated. Both the state and the federal water come into the O'Neill Forebay and are lifted at the Gianelli Pumping Plant into the San Luis Reservoir. Both the San Luis pumping plant and the O'Neill pumping plant pump and generate. The San Luis Canal is shared between the federal government and the state government. At 2 million acre-feet, the San Luis Reservoir is the largest off stream storage facility in the U.S.

Bruce asked why there are two canals. Tom explained that the Delta Mendota canal was built in the late 1930s or early 1940s when the Friant Dam was built on the San Joaquin River. The California Aqueduct was built in the 1960s as a joint use project.

Tom also discussed the issue of water levels. DWR pumps at night when electricity rates are low and generates during the day when electricity rates are higher. It is very difficult to match scheduled demands, real time demands, and desired water levels. DWR also has as a goal to generate income from the electricity generation. *George Ground asked whether it would increase DWR operational expenses to increase the current water level fluctuation of 218-222 to 220-222.* Tom responded that, although it sounds easy, an entire team at DWR is working on generating the information that goes into the water levels. They are aware of the windsurfers desires but the level of the water is driven by the financial situation. *Vern Masse added that the windsurfers really want to understand the mechanics behind the water levels and whether costs are somehow higher when water levels are maintained at a higher minimum level.* Bob Epperson responded that the downstream water users, farmers and cities, are affecting the water levels. This is affected by high temperatures and the price of electricity. Tom added that there are environmental restrictions placed on pumping water through the Sacramento-San Joaquin Delta. For example, pumping through "Tracy" and through "Banks" is affected by fish counts in the Delta. *George Ground asked whether DWR could benefit from widening the Reservoir.* Mandeep responded that many studies would need to be done regarding siltation, channel capacity, surface evaporation, and dredging material. *Bruce asked when pumping was stopped.* Tom said that the highest pumping occurs between October and March but it can also occur all year long.

Robert King, Merced County Planning Department

The County receives a great benefit from the San Luis Reservoir and Pacheco State Park. As neighbors, they would like to work closely with state and federal governments, particularly in addressing the pressures on wildlife. Merced County has approved some subdivision projects, mostly in the Santa Nella area.

Wayne Woodruff asked about the status of Merced County's General Plan, amendments, Williamson Act implementation, and whether any standards had changed recently. Bob responded that the General Plan has not been updated but it has not been budgeted and is not currently the highest priority. Merced is the last County within the Central Valley to implement the Williamson Act Amendments. The Santa Nella Specific Plan took the last 10 years to complete and has considerably more documentation than the General Plan. Merced County is working closely with DFG and USFWS on the HCP for the west side of the county, as they have been doing for the east side.

Other Issues

Steve Pearl stated that Highway 152 egress issues from different locations within San Luis Reservoir and Pacheco State Park need to be addressed. The Dinosaur Point Road left hand turn is a safety hazard, as are the Basalt left turn and the San Luis Creek left turn. Donna responded that the planning team will be reviewing all of the information that was generated as part of the preliminary scoping meetings which included discussion about traffic safety issues. She also stated that currently, Caltrans does not have proposals for safety improvements but that the General Plan could make recommendations regarding these issues.

Bruce Huchul asked about the high speed bullet train. Dennis responded that DPR has been attending the meetings and the final route has not been chosen yet. A decision likely will be

made this summer. Dave Gould added that one alternative would run between the cemetery and Checkpoint 12.

Dan Applebee asked about the connection between the General Plan process and the Santa Clara Valley Water District San Luis Lowpoint project. Dave Gould described that water is pumped to a reservoir in San Benito County. When water levels are low, algae in the San Luis Reservoir causes problems for pumping. The SCVWD is looking at 18 alternatives to address the problem of the lowpoint. They expect to have the alternatives narrowed to six by February. Tom added that SCVWD will be concerned about anything that affects their access to the San Luis Reservoir and Dinosaur Point Road.

Dan Applebee asked whether the control of water levels would be included within the General Plan/RMP process. Bob responded that water levels were affected by issues beyond the scope of the RMP. Wayne added that the General Plan could include policies regarding ways to try to resolve some of the conflicts. It will not, however, have any legal authority to solve the conflicts.

Bob Epperson stated that he has gotten some useful suggestions out of this scoping meeting, particularly for automated real time water levels at the O'Neill Forebay and for the idea of studying the possibility of increasing water levels at the O'Neill Forebay.

Steve Pearl asked about the possibility of dedicating some roads for gravity sports, as opposed to leaving them open for dual use. Donna responded that this could possibly be included as a recommendation.

Mike Mulligan commented on DFG's interests in the process: 1) DFG would like to see the General Plan process help to fill some of the gaps in knowledge about wildlife, at least as part of its recommendations; 2) DFG's constituency also includes hunters and fishers and they would like to see these activities maintained, if not expanded; 3) the General Plan provides an opportunity for a long-term Section 1600 permit for ongoing maintenance activities; and 4) addressing the issue of permits for endangered species.

Conclusions & Next Steps

Donna Plunkett thanked everyone for their participation and reminded everyone to sign in to ensure that they would receive future mailings. She also stated that there would be two additional public workshops and that newsletters would be mailed to inform people about he meetings and the planning processes.

The meeting ended at approximately 2 pm.

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
AND
US BUREAU OF RECLAMATION
SCOPING MEETING
FOR
PACHECO STATE PARK GENERAL PLAN & EIR
AND
SAN LUIS RESERVOIR STATE RECREATION AREA JOINT GENERAL PLAN and RESOURCE MANAGEMENT PLAN & EIR/EIS
Saturday, January 11, 2003
Four Rivers District Headquarters
Gonzaga Road
10:00 am – 2:00 pm.

10:00-10:30 am Sign-In and Introduction

- Team Overview—Four Rivers District, Department of Fish & Game, Department of Water Resources, Bureau of Reclamation, Consultants*(Dave Gould, Acting Superintendent, Four Rivers District)*

10:30-10:45 am Planning Process Overview & Public Participation

- General Plan – Resource Management Plan & Environmental Impact Report/Statement *(Donna Plunkett, EDAW)*

10:45-11:15 am Project Overview

- Pacheco State Park General Plan & EIR
  - General History (Dave Milam, Ranger, Four Rivers District)
  - Recreation Overview (Dave Gould, Acting Superintendent, Four Rivers District)
  - Interpretive Overview (Mary Stokes, Interpretive Specialist, Four Rivers District)
  - Natural Resources Overview (Leo Edson, Biologist, EDAW)
  - Cultural Resources Overview (Warren Wulzen, Archeologist, Four Rivers District)

- San Luis Reservoir State Recreation Area Joint General Plan and Resource Management Plan &EIR/EIS
  - General History (Bob Epperson, US Bureau of Reclamation)
  - Recreation Overview (Dave Gould, Acting Superintendent, Four Rivers District)
  - Interpretive Overview (Mary Stokes, Interpretive Specialist, Four Rivers District)
  - Natural Resources Overview (Leo Edson, Biologist, EDAW)

- Cultural Resources Overview (Warren Wulzen, Archeologist, Four Rivers District)

11:15-12:00 pm Question & Answer

- Public Comment Period (written comment cards are available if you do not wish to speak)

12:00-12:45 pm Open House

- Light Refreshments & Mingling

12:45-1:30 pm Break-out Groups – Visioning Session

- Pacheco State Park (Facilitated by Dave Milam & Corrina Kweskin)
- San Luis Reservoir State Recreation Area (Facilitated by Dave Gould and Leo Edson)

1:30-1:50 pm Visioning Session Summaries

1:50-2:00 pm Conclusions & Next Steps

GENRAL PLAN/RESOURCE MANAGEMENT PLAN and EIR/EIS

SCOPING MEETING

FOR
SAN LUIS RESERVOIR STATE RECREATION AREA
February 20, 2003
Four Rivers District Headquarters

MEETING SUMMARY
Issue Date: March 6, 2003

Participants
Robert Epperson, RMP Coordinator, BOR
Dan Holsapple, Resource Management Specialist, BOR
Donna Plunkett, Project Manager, EDAW
Wayne Woodroof, Statewide Coordinator, DPR
Jerry Bartholomew, DWR
Warren Wulzen, Associate State Archaeologist, DPR
Dave Gould, Chief Ranger, DPR
Mary Stokes, Interpretive Specialist, DPR
Dennis Imhoff, Chief Ranger, DPR
Dave Milam, Ranger, DPR
Tom Young, DWR
Mandeep Bling, DWR

The meeting began at approximately 1:00pm. The agenda follows the summary below. *Public comments are indicated in italics.* Two poster maps were on display: "Sensitive Biological Species" and "Existing Conditions." In addition, the following handouts were distributed:

1. Agenda
2. General Plan Table of Contents
3. San Luis Reservoir Resource Inventory (January 1973)
4. San Luis SRA Preliminary Scoping Document (11/20/01)
5. San Luis Reservoir SRA General Plan and RMP EIR/EIS Notice of Preparation (11/22/02)
6. California State Parks Planning Handbook Pages 29-37 (February 2002)
7. Contact List

Sign-In and Introduction
A sign-in sheet was provided and all participants were asked to sign-in. As there were only three participants in addition to the staff that was present, it was decided that the full overview noted on the agenda was not necessary. Donna Plunkett started off by giving an overview of the

planning process and noted this meeting was in addition to a scoping meeting held on January 11, 2003.

Planning Process Overview & Public Participation

Donna Plunkett from EDAW thanked everyone for attending and provided an overview of the General Plan process and EDAW's role as the consultant. She described that there are two separate processes for the Joint General Plan/RMP and for the EIR/EIS. This is joint effort of DPR and Reclamation as DPR manages much of the land that Reclamation owns for recreation. The map of Existing Conditions displays ownership and management in the area and she pointed out the mosaic of agencies and land areas that comprise the SRA. She referenced the State Parks Planning Handbook and noted the section on the planning process. EDAW is currently putting together the existing conditions, noting that this a particularly appropriate time to get feedback on maps and other data.

She noted that the next step in the process will be to develop alternatives over the next few months with the goal of a preferred alternative by summer of this year. It was noted that there will be two other public workshops and opportunities for public comment. It was also noted that the EIR/EIS for San Luis will be program level analysis and that future projects implemented as part of this process may require a project level analysis.

Bob Epperson gave a brief overview of the SRA and noted that the project area does not include the canal areas. He suggested that we open the meeting up for informal discussion since we had a small group and the visitors were from DWR. *Tom Young noted that since the last meeting when there was a request for water level data to be placed on the internet, he has been working on getting this information posted on the California Data Exchange. He then asked about sewage handling at Pacheco State Park.* Wayne Woodroof commented that the General Plan will not have a specific design for a system as we would cover broader recommendations. Donna noted that certainly the General Plan would take into consideration the surrounding resources if there were to be a recommendation for a future restroom facility.

Bob Epperson asked about the allocation of water resources and asked about any existing entitlements that DWR knows about. It was noted that DPR is provided water as they are entitled to a certain amount although currently do not use near the agreed upon amount. *Tom Young noted that each area of the SRA has a water supply and distribution system in place and briefly reviewed what these are.*

Tom asked a question about notifying people for the meetings. Donna gave a brief overview of the outreach work that is being done as part of the planning process. She explained that a database has been set up with individuals and agencies that are recognized as stakeholders for work in this area. She noted however that it may not be inclusive of all of the surrounding landowners if they were not on the lists that DPR provided Dennis Imhoff noted that for Pacheco they had most of the landowners but not for the SRA. *Tom noted that they have a list of contact people that use to notify for dam release issues.* Donna said that they would incorporate it if he sends it to her. She also noted that the other DWR contacts that Tom gave Dennis were already added to the database.

Bob noted that recently, Reclamation published a notice regarding the encroachment of a private landowner on Federal land in the vicinity of Interstate 5 and the San Luis Canal. He noted that this area was a kit fox mitigation parcel. There was a brief discussion about the portions of the Los Banos Retention Dam that were part of the GP/RMP and it was noted that the DWR owned land in that area was not included. The Los Banos Grande Dam project was noted and that led into a discussion about regional planning efforts and how they fit within the planning process. *Jerry Bartholomew noted that security is an issue and DWR tries to prevent access from the highway.* Donna noted that all regional plans are mentioned in the Plan and a summary is provided. So far, the plans included, amongst others are the Los Banos Grande Dam project, Caltrans Regional Transportation Plan and the plan for a regional light rail system.

Donna then noted briefly that there are natural and cultural resources that are being considered in the Plan. Namely, that there are many archaeological sites that are in the Valley where the reservoir exists now. She also noted that there are endangered species In the vicinity of the project area including the kit fix and the red-legged frog which will require coordination with US Fish and Wildlife Service. Mary Stokes noted that the power plant tour is very popular and water related interpretive programs are in demand.

She noted that since some tours ended after 9/11, it would be great if there were some other location where an old turbine could be placed to tell the story of the water pumping. A brief discussion ensued about the Romero Visitor's Center and that DWR manages that for interpretive and educational information. It was suggested that Mary contact Sara Betterridge, about any future programs.

Bob Epperson asked Mandeep Bling from DWR about the use of the quarry. *Mandeep noted that the quarry has been set aside for future rock reserves should they be needed for the dam*. Bob noted perhaps the area should be cordoned off from access as presently it is possible to gain access to the area. A discussion ensued as to who has management authority over certain areas of the SRA. Donna noted that there has been a summary compiled all the legal agreements between Recalmation and the various agencies that have land or management jurisdiction in the SRA. Bob noted that the agreement about the quarry was not in the legal agreements that he had.

Tom Young noted that the letter that DWR submitted as part of the scoping process included a provision about how the rangers should be trained to deal with a variety of enforcement issues outside of just recreation-related violations but that DWR keeps limiting access to certain areas within the SRA which makes it harder for them. He noted that perhaps there can be a joint access system, such as a common key or combination lock that both agencies can utilize.

Dave Gould asked if DWR staff knew of any agreements for cattle grazing north of SR 152 where currently, the cattle graze right tot eh edge of the water. *Mandeep did not know of any but said he would look into the matter.* The matter of cattle grazing shifted to Los Banos where the question also arose about the rights at the water's edge there. *Mandeep noted that he thought there was a lease in that area. Joanne Karlton noted that DPR has a continual fence maintenance problem in that area.*

Donna concluded that if there were no more comments or questions, there is always an opportunity to contact her directly on behalf of DPR or others who are noted on the contact list provided.

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
AND
US BUREAU OF RECLAMATION
SCOPING MEETING
FOR
SAN LUIS RESERVOIR STATE RECREATION AREA JOINT GENERAL PLAN and RESOURCE MANAGEMENT PLAN & EIR/EIS
Thursday, February 20, 2004
Four Rivers District Headquarters
Gonzaga Road
1:00 pm – 3:00 pm.

1:00-1:15 pm - Sign-In and Introduction

- Team Overview – Four Rivers District, Department of Fish & Game, Department of Water Resources, Bureau of Reclamation, Consultants*(Dave Gould, Acting Superintendent, Four Rivers District)*

1:15-1:30 pm Planning Process Overview & Public Participation

- General Plan – Resource Management Plan & Environmental Impact Report/Statement *(Donna Plunkett, EDAW)*

1:30-2:00 pm Project Overview

- San Luis Reservoir State Recreation Area Joint General Plan and Resource Management Plan &EIR/EIS
  - General History (Bob Epperson, US Bureau of Reclamation)
  - Recreation Overview (Dave Gould, Acting Superintendent, Four Rivers District)
  - Interpretive Overview (Mary Stokes, Interpretive Specialist, Four Rivers District)
  - Natural Resources Overview (Joanne Karlton, Biologist, Four Rivers District)
  - Cultural Resources Overview (Warren Wulzen, Archeologist, Four Rivers District)

2:00-2:45 pm Question & Answer

- Public Comment Period (written comment cards are available if you do not wish to speak)

2:45-3:00 pm Conclusions & Next Steps

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION, US BUREAU OF RECLAMATION AND EDAW TEAM
SAN LUIS RESERVOIR STATE RECREATION AREA
GENRAL PLAN/RESOURCE MANAGEMENT PLAN &EIR/EIS
USFWS CONSULTATION MEETING
AGENDA
Thursday, March 13, 2003
USFWS Sacramento Office

11:00-11:30 pm - Project Overview & Status

- Current Mapping and Status of Data (Review Existing Mapping)
- Alternatives Development (Overview of Possible Project Components)
  - trail additions and improvements
  - additional boat launching areas
  - additional swimming beach
  - infrastructure improvements
  - camping facilities
- Inter-agency Cooperation (DPR, Reclamation, DFG, DWR)

11:30-12:15 pm Consultation with USFWS

- San Joaquin Kit Fox (review of KFPACT corridor mapping)
- Red-legged frog at SRA and Pacheco SP
- Response to USFWS Scoping Letter
- Consultation with USACE (Section 404 requirements)
- Consultation with DFG (CESA and Streambed Alteration Permitting)

12:15-12:45pm Next Steps and Action Items

- Timeline for Planning Work

California Department of Parks and Recreation
Four Rivers District
31426 Gonzaga Road
Gustine, CA 95322

San Luis Reservoir Pacheco Park

GENERAL PLANS

NEWSLETTER #2

SAN LUIS RESERVOIR STATE RECREATION AREA • PACHECO STATE PARK

Calendar of Events

GENERAL PLAN PROCESS AT A GLANCE

FALL 2002	WINTER 2003	SPRING/SUMMER 2003	FALL 2003	SPRING 2004
Information Gathering Fieldwork	Summarize Existing Conditions Discuss Opportunities & Constraints WORKSHOP #1 and EIR Scoping Meeting	Develop Plan Alternatives WORKSHOP#2 Draft General Plan Preparation	Public Review of Draft General Plan & EIR	Distribute Final Plans & EIR/EIS Agency Approvals

PARTICIPATION IS THE KEY TO A GREAT PLAN!

PARTNERS IN PLANNING

The first public planning workshop for the San Luis Reservoir General Plan/Resource Management Plan and Pacheco State Park General Plan was a success! Thanks to all who attended and shared their ideas about the parks' futures and also to those of you who filled out the survey. A summary of comments from the scoping meeting/workshop and the survey are enclosed. We're now in the process of incorporating your ideas into three alternatives for each Plan. These plans will define long–term visions for the parks, identify desired improvements and enhancements, and provide guidelines for protecting natural and cultural resources.

Public Planning Workshop #1

Public Planning Workshop #2:

Tuesday, May 27, 2003
4:00 pm to 8:00 pm
Four Rivers District Office
31426 Gonzaga Road
Gustine, CA 95322

HOW CAN YOU CONTRIBUTE?

Stay Informed: This newsletter is being published to keep you informed about the progress of these planning processes. It covers both the San Luis Reservoir State Recreation Area joint General Plan and Resource Management Plan and the Pacheco State Park General Plan. Because the parks are adjacent to each other, the planning processes are being combined to make it easier for you to participate. You may also visit the State Parks website at www.parks.ca.gov to get updated information. To access the General Plan website from the main page, under Related Links click on "Planning", then under Related Links click on "General Plans", then under Related Links click on "Plans In Progress", then click on "San Luis Reservoir State Recreation Area" or "Pacheco State Park."

Attend the Second Public Planning Workshop: We will host the second public workshop for the San Luis Reservoir State Recreation Area and Pacheco State Park General Plans from 4:00 to 8:00 pm at the Four Rivers District Office (see location on map inside). We will present the three alternatives for each of the parks and ask for your input to help select the preferred alternatives for the General Plans. You will have the opportunity to comment and vote on the alternatives so that the preferred alternative can be selected with your input in mind. After the public meeting, the final preferred alternative will be chosen and used to craft the draft plans and analyze environmental impacts.

This meeting will be designed as an open house – so you can drop in any time during the session to learn about the alternatives and provide your comments. Presentations for the alternatives will be given at 90 minute intervals between 4:00 and 8:00 pm so you don't need to stay for the whole meeting to participate. Your attendance is important for reviewing the plans, so please join us!

Dinosaur Point Boat Ramp

Summer Hills at Pacheco

Contact Information

If you are not currently on our mailing list and would like to receive the planning update and notice about future workshops, or wish to send written comments, please contact us at:

California Department of Parks and Recreation
Four Rivers District
31426 Gonzaga Road
Gustine, CA 95322
209.826.1197
(for questions or comments about the General Plan Process)

For general information about park use (e.g. hours, activities), please call:
1–800–346–2711

Visit Our Website
www.parks.ca.gov/generalplans

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PACHECO STATE PARK

Pacheco State Park was created when Paula Fatjo bequeathed the property in her will to DPR for the "protection, maintenance, and fostering of natural flora and fauna thereon."

Based on issues identified through the scoping process and keeping the stated purpose of the park in mind, the alternatives for Pacheco should provide solutions for a variety of issues related to resource protection and recreation enhancements. It is useful to think of alternatives in terms of a range from minimum to maximum — or as passive uses, such as nature study, and active uses, such as overnight camping. The alternatives will include options such as:

- providing access to the adjacent San Luis State Recreation Area
- improving access and safety off State Route 152
- expanding day use areas and overnight camping
- exploring concession services for equestrian use and mountain biking rentals
- expanding trail use to more areas of the park
- expanding self–guided interpretive programs and provide an all–weather shelter for group gatherings
- continuing cultural and historic resource inventories and monitoring and set up a collections facility
- protecting native plant species utilizing best management practices
- continuing existing feral pig management and increase as resources allow
- evaluating maintenance of stock ponds and adjacent dams

MANAGEMENT ZONES AND ALTERNATIVES DEVELOPMENT

The planning process for San Luis and Pacheco will serve to guide the future of these parks for the next 30 years. To determine where future facilities and resource protection should occur, the designation of management zones is a planning tool that will be employed in this process. Management zones will help in describing the purpose of various areas within the parks, as well as depict their intended uses.

Management zones are set up based on what activities or resources exist in a given area now, as well as future goals for the area based on opportunities and constraints and issues identified by the stakeholders, as outlined in the enclosed summary. For San Luis, designations for both the land area and the surface water areas are proposed, since distinct activities occur in each.

To assist in developing alternatives, a summary of opportunities and constraints has been developed based on input received during the early scop–ing phase of this planning process and can be categorized in the following topics: Local and Regional Planning; Infrastructure and Operations; Water Operations; Visitor Experience and Education; and Resource Management.

LAND-BASED MANAGEMENT ZONES

1. **Administration/Operations Zone (AO)**
   Proposed Uses
   - Storage
   - Administrative uses
   - Office space
   - Maintenance
   - Staff living quarters
   - Historic buildings
   - Interpretive facilities
2. **Frontcountry Zone (FC)**
   Proposed Uses
   - Visitor orientation
   - Visitor center
   - Camping
   - Day use activities
   - Parking
   - Rest rooms
3. **Backcountry (BC)**
   Proposed Uses
   - Trail use
   - Limited mechanized vehicles
   - Passive recreation
   - Grazing
   - Limited visitor access
   - Limited recreation
   - Nature study
   - Research
4. **Leased Zone (LZ)**
   (Pacheco State Park only)
   Proposed Uses and Actions
   - Vegetation and wildlife management
   - Limited public access
   - Wind turbines
   - Interpretive trails
   - Link to SRA lands

WATER-BASED MANAGEMENT ZONES

For the water–based designations at San Luis, an inventory system known as Water Resources Opportunities Spectrum (WROS) was employed and yielded the following results for each of the unit's reservoirs:

O'Neill Forebay – Suburban Recreation Zone (S)

- Highest concentration of water uses including personal watercraft, windsurfing.

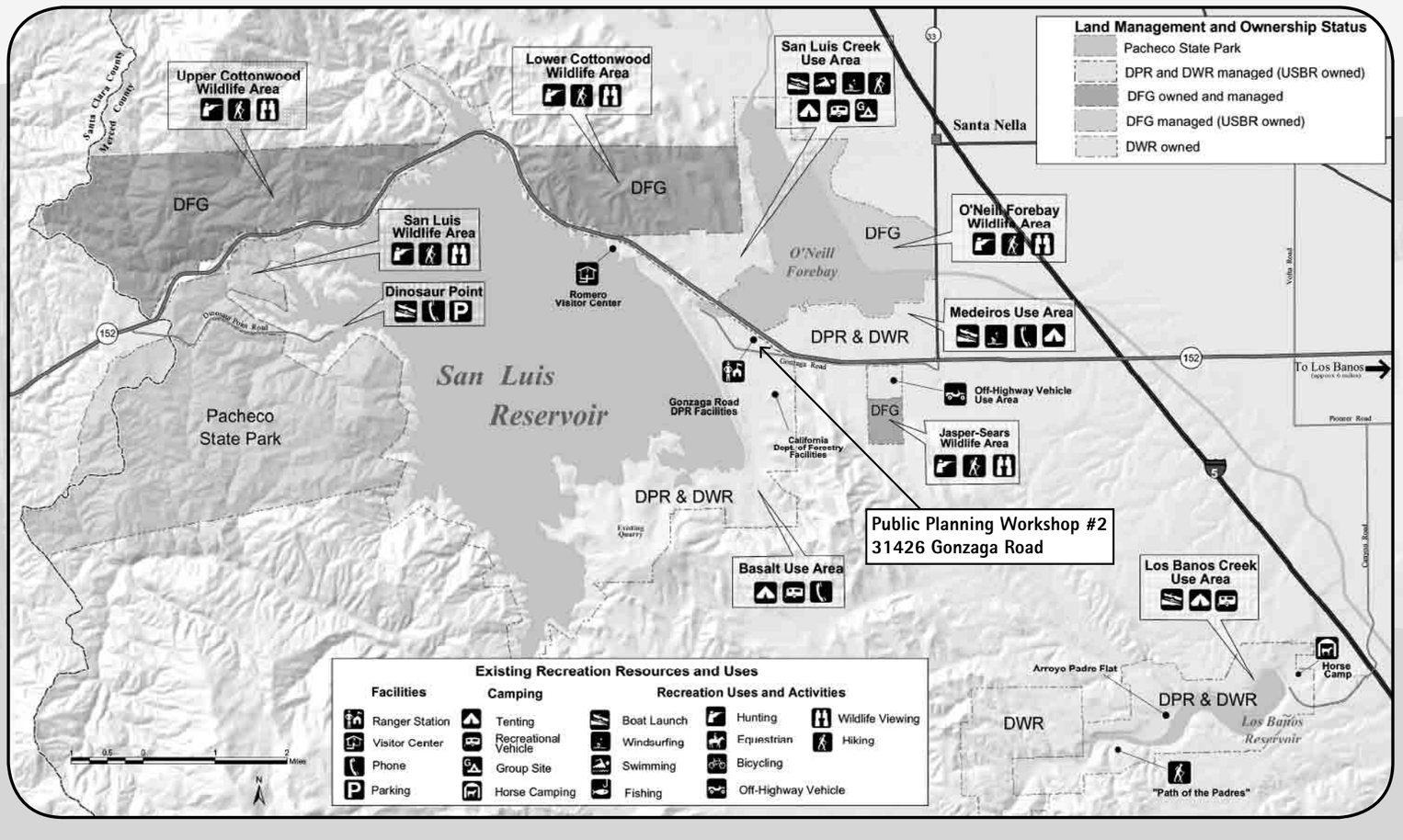
San Luis Reservoir – Rural Developed Recreation Zone (RD)

- Maintain current water uses.

Los Banos Reservoir – Rural Natural Recreation Zone (RN)

- Least concentration of water uses excluding personal watercraft, windsurfing and water skiing and allowing non–motorized boating.

WROS is a planning tool to in–ventory, plan and manage wa–ter recreation resources for the future. We will be conducting additional WROS inventories and if you would like to participate, please contact us and we will let you know how you can help!



SAN LUIS RESERVOIR STATE RECREATION AREA

The San Luis Reservoir State Recreation Area was created when the U.S. Bureau of Reclamation developed the property for water storage and distribution. This is the primary purpose of the reservoirs and associated operational facilities located on over 25,000 acres of land and water that make up the project area. As part of that work, the Bureau set up a management agreement with the State to use portions of the area for recreation. California Departement of Parks and Recreation's purpose statement for the area includes:

"the full utilization of the aquatic and other recreational opportunities in and about San Luis Reservoir and its Forebay; together with consideration for all scientific, scenic, and historical resources of the area."

Land and water areas are also managed by the California Department of Water Resources and California Department of Fish and Game. The map to the left illustrates the ownership, management and existing recreational uses of the two parks. The planning process for San Luis must consider the management responsibilities of each of the four agencies.

The alternatives for the State Recreation Area should provide solutions for a variety of issues for recreation and resource management while recognizing the unit's primary role for water supply and distribution. It is useful to think of alternatives in terms of a range from minimum to maximum improvements or management activities or from passive to more active recreation solutions. The alternatives will include options such as:

- providing linking trails between adjacent public lands
- improving access and safety between use areas
- expanding and improving visitor facilities and recreational opportunities
- providing concession services in limited areas
- maintaining and improving interpretive programs and facilities
- continuing cultural and historic resource inventories and monitoring and setting up a collections facility
- maintaining and providing wildlife corridors and habitat particularly for the San Joaquin kit fox
- protecting native plant species utilizing best management practices

GENERAL PLAN/RESOURCE MANAGEMENT PLAN and EIR/EIS
ALTERNATIVES WORKSHOP
FOR
SAN LUIS RESERVOIR STATE RECREATION AREA
AND
PACHECO STATE PARK
May 27, 2003
Four Rivers District Headquarters

MEETING SUMMARY
Issue Date: July 9, 2003

Participants

Lynn Hurley, SCVWD
Tom Young, DWR
Sam Halsted
Steve Pearl, Wild Fro Racing, LLC
Gary Florence
Matthew A. Fantazia
David Milam, DPR
Claudia Gonzalez
Chet Vogt
Gloria Escallier
Don Escallier
Anne Newins
Madeline Yancey
Dennis Woolington
Robert King, Merced County Planning Dept.
Dave Gould, Chief Ranger, DPR
Warren Wulzen, Associate State Archeologist, DPR
Mary Stokes, Interpretive Specialist, DPR
Bob Epperson, RMP Coordinator, BOR
Donna Plunkett, Project Manager, EDAW
Ian Ferguson, Environmental Analyst, EDAW
Wayne Woodroof, Statewide Coordinator, DPR
Dennis Imhoff, Chief Ranger, DPR

The meeting began at approximately 4:00pm. The summary below follows the attached agenda follows. *Public comments are indicated in italics.* Two poster maps were on display: "San Luis Reservoir Draft Alternatives Table" and "Pacheco State Park Draft Alternatives Table." Also on display were nine 11 x 17 maps, three showing Alternatives 1, 2, and 3 for San Luis Reservoir SRA and six showing Alternatives 1, 2, and 3 for Pacheco State Park (one showing the entire park and one enlargement for each alternative). In addition, the following handouts were distributed:

1. Agenda
2. San Luis Reservoir SRA General Plan and RMP EIR/EIS Notice of Preparation (11/22/02)
3. Pacheco State Park General Plan/EIR Notice of Preparation (11/22/02)
4. Newsletter
5. Surveys
6. San Luis Reservoir SRA General Plan Alternatives Table
7. Pacheco State Park General Plan Alternatives Table

8. Contact List

Sign-In and Introduction

Donna Plunkett provided a brief introduction to the planning process as well as to the meeting, including an outline of the meeting's purpose, agenda (attached), and goals. The purpose of the meeting was to update the public on planning process and to obtain public input and opinions on the development of general plan alternatives for both units. The goals of the meeting were to answer any questions regarding planning alternatives and alternatives development and to obtain public input to incorporate into the final alternatives. Attendees then introduced themselves their names and their interest in the planning process.

Presentation of Planning Process and Alternatives

After all attendees had introduced themselves, Donna Plunkett conducted a Powerpoint presentation (attached) detailing the planning process and the development of general plan alternatives for both units. The presentation began with a brief introduction to the planning process in general, including a planning process timeline and a discussion of the plan's purpose, and the meeting's goals and outcomes.

Following the general overview of the process, Donna discussed the factors taken into consideration in developing the alternatives for the San Luis Reservoir SRA. Major factors include the unit's purpose and vision; the missions of the Department of Parks and Recreation (DPR), Department of Fish and Game (DFG), and the Bureau of Reclamation (BOR) in managing the unit; and stakeholder input and concerns, including comments from the first public meeting, scoping letters, and surveys. Each of these factors, as well as an overview of the project area reservoirs and ownership and management, was discussed in detail to provide information on how alternatives were developed and where conflicts of interest may arise, and key opportunities and constraints at each unit were summarized. Finally, Donna introduced the conceptual models used in developing alternatives, including the development of "Passive," "Moderate," and "Active" alternatives, the use of management zones, and the Water Recreation Opportunities Spectrum (WROS).

After this thorough background, the San Luis Reservoir SRA planning alternatives were presented using maps to show the management zones along with existing and proposed future uses and developments. Alternative 1 includes the least amount of active development and management, including less development of new facilities, programs, and resource management activities. Alternative 2 includes a moderate amount of development, and Alternative 3 includes the most development.

Sam Halsted asked if an analysis had been carried out to determine the carrying capacity at Pacheco State Park. Donna answered that no quantitative analysis has yet been conducted and that current planning activities are focusing on collecting public opinion regarding the types of activities and uses, use levels, and development that is desired for the park. Wayne Woodroof commented that the planning process is looking for development of alternatives based on public and agency goals, and that a complete analysis of specific issues such as carrying capacity will be carried out during the CEQA review process for individual projects. Donna added that all three

alternatives include natural and cultural resource protection to ensure that the park's use levels will not negatively impact the park's unique resources.

Steve Pearl asked whether it is assumed that the management/use categories used in the planning process reflect existing use and existing development, or if they allow for new and future uses and developments in each unit. In addition, he asked if the planning process looks at the "nature of the users" at each use area, including their uses and opinions. Donna commented that the general plans outline each unit's goals for the next 30 years, that regional and visitor demographics have been analyzed, and that surveys have been distributed in an attempt to determine and incorporate the "nature of the users" as best as possible. Furthermore, Donna commented, specific studies will be conducted during implementation of specific general plan alternatives. In addition, Wayne Woodruff commented that uses do show something about the nature of the users, and that CEQA will require a complete analysis of future changes associated with implementation of alternatives. Lastly, Bob Epperson commented that trends in users are another consideration to be included in the planning process, as is compatibility with nearby uses. Bob used the example of developing a marina in an area currently enjoyed as a quiet, remote fishing area; development of one use should not exclude another existing use, particularly one with a high number of users.

Specific management and development activities under each alternative are shown in the attached San Luis Reservoir Draft Alternatives Table and the attached maps of the alternatives. (Note: in the interest of time and *at the request of Sam Halsted, who wanted to see the alternatives for Pacheco State Park and had to leave at 6:00pm*, only Alternatives 1 and 2 For San Luis SRA were presented in detail.)

Next, the development of planning alternatives for Pacheco State Park was presented in detail, including DPR's mission, stakeholder concerns at the unit, and the key opportunities and constraints for development. Alternatives 1, 2, and 3 were then detailed through maps showing the management zones and existing and proposed future uses and developments, as for San Luis Reservoir SRA. Alternative 1 again proposed the least development of facilities, uses, programs, and resource management, while Alternative 3 again proposed more intensive development.

Sam Halsted commented that he has an easement on 4 acres immediately northeast of Pacheco State Park. His easement allows for cattle gathering, and for potential development of the old Butterfield Stage Mountain House located on the property, which he is willing to work on with the appropriate parties. Sam also commented that much of the area around Pacheco State Park is being subdivided and sold, and that there will be increasing residential development in the near future. This should be noted and addressed as much as possible during the planning process. In addition, Sam commented that Whiskey Flat Road should not be used for public access to the park, and that increasing development and traffic in the area is making the intersection of SR 152 and Dinosaur Point Road increasingly dangerous.

During the presentation of alternatives, Sam Halsted asked how the existing cattle route through the park and the existing corals used by cattle ranchers would be changed. Donna answered that cattle routes would be realigned to avoid day use areas and other major use areas and would most likely be moved south, but that specific changes have not yet been proposed.

Tom Young asked if the windmill lease would be renewed under Alternative 1. Donna answered that no the lease would not be renewed in Alternative 1 and that impacts associated with both lease renewal and windmill removal will be analyzed. Dave Milam further commented that Alternative 3 proposes an extension and expansion of the windmill lease, but that this does not necessarily include expansion of the geographical area of the lease. In addition, Tom asked if a speed reduction for SR 152 in the vicinity of Dinosaur Point Road would be proposed in Alternative 1, or either of the other alternatives. Donna answered that while a speed reduction has not been included as a recommendation in any alternative, it is still an option and may be included.

Gary Florence asked what the equestrian concession proposed under Alternatives 2 and 3 would entail. Donna answered that under Alternative 2, minimal stable and corral facilities would be developed to allow for seasonal horse rental, while under Alternative 3, full stable and corral facilities would be developed to allow for year-round horse rental as well as possible boarding of privately owned horses. Specific facilities have not fully been determined and may better be addressed during implementation, though potential concessions will be included in the general plan.

Steve Pearl again commented that it is essential to address the dangerous intersection of SR 152 and Dinosaur Point Road.

Sam Halsted commented that the development and planning of SR 152 originally included an interchange at Dinosaur Point Road. This interchange was eventually dropped, and the right-of-way that had been acquired by Caltrans relinquished, due to low use in the area and low Caltrans priority. This indicates that Caltrans is aware of the dangers at this intersection, and that there is a possibility of working with Caltrans to make some degree of improvement.

Chet Vogt commented that the planning process must regard biodiversity as a highest priority at Pacheco State Park, as is detailed in Paula Fatjo's will. Because the park's lands have been continuously grazed for two hundred years, grazing is a necessary component of preserving the land and its existing biodiversity. Grazing should be maintained as a priority to keep the land healthy and natural. Donna and Dave Gould responded that grazing is currently included in each alternative at least as a grazing management option, and that DPR is currently conducting studies to determine its benefit to biodiversity.

Gary Florence asked what alternatives have been included for park maintenance facilities and equipment at Pacheco State Park. Currently, Gary added, facilities and equipment are extremely limited; there is no space to carry out simple tasks such as cutting a board, and such tasks are currently done on the backs of workers' trucks. Donna answered that the need for additional maintenance facilities and equipment has been acknowledged and discussed, but that specific needs and alternatives have not yet been developed. Maintenance facilities and equipment will be included in the Administrative and Operations Zone, and there is the possibility of an enclosed work/maintenance building.

Specific management and development activities under each alternative are shown in the attached Pacheco State Park Draft Alternatives Table and the attached maps of each alternative.

Finally, Donna asked the attendees to review the tables and maps posted on the walls and tables around the room, and to make comments using stickers and post-it notes. She asked people to review the maps for each alternative, read through the alternatives tables posted, and ask her or the parks staff any questions they might have, then to mark their favored alternatives with the colored tabs provided. In addition, she asked that specific comments be included on post-it notes or written on the smaller printouts of the tables and returned to the parks office by mail or by hand.

Open House

Following the presentation, attendees reviewed the maps and tables provided and asked questions, marked their favored elements of each alternative, and made comments on the post-it notes provided. Approximately 20 copies of the alternatives tables were distributed for further review and commenting.

Conclusions & Next Steps

After receiving mailed-in comments, EDAW and DPR staff will work to finalize the planning alternatives and identifying the preferred alternative. Finalization of alternatives will incorporate public opinion and will include further development of alternatives as needed. Following the completion of the alternatives, the Draft General Plan and EIR/EIS will be prepared in compliance with CEQA and NEPA. The meeting ended at approximately 8:00pm.

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
AND
US BUREAU OF RECLAMATION
ALTERNATIVES WORKSHOP
FOR
PACHECO STATE PARK GENERAL PLAN & EIR
AND
SAN LUIS RESERVOIR STATE RECREATION AREA JOINT GENERAL PLAN and RESOURCE MANAGEMENT PLAN & EIR/EIS
May 27, 2003
Four Rivers District Headquarters
Gonzaga Road
4:00 – 8:00 pm.

4:00-4:30 pm **Sign-In and Introduction**

- Team Overview – Four Rivers District, Department of Fish & Game, Department of Water Resources, Bureau of Reclamation, Consultants*(Dave Gould, Acting Superintendent, Four Rivers District)*
- Handouts
- Meeting Format

4:30-5:45 pm **Alternatives Presentation #1**

- Feedback Session

5:45-7:00 pm **Alternatives Presentation #2**

- Feedback Session

7:00-8:00 pm **Alternatives Presentation #3**

- Feedback Session

July 11, 2003

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Re: Tribal Contacts for Western Merced and Eastern Santa Clara Counties

Dear Ms. Treadway:

EDAW Inc. has been retained by the California Department of Parks and Recreation working jointly with the U. S Department of the Interior Bureau of Reclamation to prepare a joint General Plan (State) and Resource Management Plan (Federal) at the San Luis Reservoir State Recreation Area ("SRA") in Merced County. We are also preparing a General Pan for Pacheco State Park in Merced and Santa Clara counties which is adjacent to the SRA on the west. These parcels are depicted on the San Luis Dam, San Luis Creek, Pacheco Pass, and Ortigalita Peak NW USGS topographic quadrangle maps and highlighted on the attached map. As part of these planning efforts we are also preparing program level EIR/EIS's as necessary.

We are pleased to bring this activity to your attention, and would appreciate any background information you can provide regarding prehistoric, historic or ethnographic land use. We are also interested in any contemporary Native American values that might be present in or near the project area and would appreciate a search of the Sacred Lands File and a list of local Native American contacts at your earliest convenience.

If you have any questions or need further information for these requests, please feel free to contact me at the number noted hereon or by email at ludwigb@edaw.com or the EDAW project manager, Donna Plunkett at 415-433-1484, email at plunkettd@edaw.com. Thank you for attention to this matter.

Sincerely,

SAN LUIS RESERVOIR SRA

EDAW

EDAW, Inc.
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San Francisco, CA 94111
(415) 433-1484